


334.3  
N318o14

THE UNIVERSITY  
OF ILLINOIS  
LIBRARY

334.3  
N318o14

ECONOMICS  
SEMINAR



Digitized by the Internet Archive  
in 2017 with funding from  
University of Illinois Urbana-Champaign Alternates





under given by re time  
H. P. Neison sur 22 Dec: 18

Dr. Schöling

# OBSERVATIONS

ON

## ODD FELLOW

AND

## FRIENDLY SOCIETIES.



BY

*FRANCIS*  
*NEISON*  
F. G. P. NEISON, F.L.S. &c.

ACTUARY.



FOURTEENTH EDITION,

MUCH ENLARGED AND EXTENDED.



London:

SIMPKIN & Co. STATIONERS' HALL COURT.

1867.

WESTMINSTER:  
PRINTED BY THOMAS BRETTELL, RUPERT STREET, HAYMARKET.

F. G. P. NEISON,

*Consulting Actuary,*

30, ESSEX STREET, STRAND,

LONDON.

## OBSERVATIONS, &amp;c.

THE Thirteenth Edition of these Observations has been out of print for some time, and it was not the intention of the author to re-issue another edition, but the condition of Friendly Societies has been recently so much discussed in Parliament and in the newspaper press with apparently very little information respecting their real state, or the circumstances which affect their actual liabilities, that it has been thought expedient to publish a new edition, in which will be treated, in as popular a manner as possible, all the questions and elements which bear on their progress and stability.

In "Contributions to Vital Statistics," Third Edition\*, will be found an elaborate analysis and examination of the data derived from the experience of Friendly and other Societies, shewing the amount of sickness and mortality at every year of life and also for quinquennial periods of life. The rates of sickness and mortality are also given for different districts, and for many trades and occupations.

The following Table I. has been formed from the results deduced from the data just mentioned, and the mode of treatment is fully described in the work alluded to.

\* Published by Simpkin, Marshall, & Co.

TABLE I.

*Average Sickness per Annum to each Person at the following Ages—expressed in Weeks.*

Age.	ENGLAND AND WALES.			
	Rural Districts.	Town Districts.	City Districts.	Rural, Town, and City Districts.
20	·8387	·8564	·5659	·8398
21	·8397	·8678	·6762	·8453
22	·8426	·8746	·7713	·8515
23	·8475	·8767	·8511	·8585
24	·8542	·8741	·9157	·8661
25	·8630	·8649	·9650	·8744
26	·8736	·8551	·9991	·8834
27	·8802	·8504	1·0303	·8915
28	·8827	·8529	1 0584	·8988
29	·8810	·8626	1 0837	·9052
30	·8753	·8794	1·1059	·9107
31	·8655	·9035	1·1252	·9154
32	·8630	·9287	1·1480	·9250
33	·8677	·9551	1·1742	·9396
34	·8798	·9827	1·2040	·9501
35	·8991	1·0114	1·2372	·9836
36	·9257	1·0414	1·2740	1·0130
37	·9551	1·0819	1 3152	1·0474
38	·9872	1·1330	1 3611	1·0869
39	1·0221	1·1947	1·4114	1·1313
40	1·0677	1·2669	1·4663	1·1808
41	1·1002	1 3498	1·5258	1·2353
42	1·1398	1·4477	1·5901	1 2939
43	1·1786	1·5608	1 6593	1·3565
44	1·2166	1·6890	1·7335	1·4232
45	1·2537	1·8323	1·8125	1 4939
46	1·2900	1·9908	1·8964	1·5688
47	1·3417	2·1423	1·9954	1·6528
48	1·4089	2·2871	2·1095	1·7461
49	1·4915	2·4249	2·2388	1·8486
50	1·5896	2·5559	2·3831	1·9603
51	1·7031	2·6800	2·5426	2·0812
52	1·8335	2·8168	2 7144	2 2161
53	1·9808	2 9662	2·8985	2 3650
54	2 1450	3·1280	3 0949	2·5279
55	2 3260	3·3029	3·3036	2·7047
56	2·5240	3·4903	3·5246	2·8956
57	2·7756	3·7450	3 7545	3·1371
58	3·0811	4·0670	3·9932	3·4293
59	3·4402	4·4564	4·2408	3·7722
60	3·8531	4·9132	4·4973	4·1657
61	4·3198	5·4373	4·7626	4·6099
62	4·9308	6·1219	5·0357	5·1904
63	5·6863	6·9670	5·3167	5·9073
64	6·5862	7·9726	5·6054	6·7605
65	7·6305	9·1387	5·9019	7·7501
66	8·8192	10·4652	6·2062	8·8760
67	10·0700	11·7646	6·7643	10 0679
68	11 3829	13·0368	7·5761	11·3257
69	12 7579	14 2817	8·6417	12·6404
70	14·1940	15·4995	9·9610	14·0391
71	15·6940	16·6901	11·5341	15·4947
72	17·1025	18 1368	13·5632	16·9652
73	18·4205	19·8395	16·0483	18·4506
74	19·6479	21·7984	18·9894	19·9509
75	20·7848	24 0134	22·3864	21 4661
76	21·8312	26·4844	26 2394	22·9963
77	22·7113	28·6170	29·4479	24·3088
78	23·4252	30·4112	32·0120	25·4036
79	23·9730	31·8669	33·9315	26·2809
80	24·3545	32 9841	35·2065	26 9405

Owing to the greater practical convenience of collecting and arranging the data as well as of subsequently applying the results to the more useful purpose of Friendly and Benefit Societies, the amount of sickness throughout the whole of this paper is invariably expressed under the denomination of weeks. For example, in Table I. opposite the age of 35 and under the head "Rural Districts," the decimal expression  $\cdot 8991$  signifies that the average amount of sickness to each individual per annum is that fraction of a week. And again, opposite the same age in the column "City Districts," the average amount of sickness to each person in the course of a year is  $1\cdot 2372$  weeks. When, however, it is required to change the expression to the more scientific denomination of the fraction of a year, that may be easily done by multiplying any of the results by  $\cdot 019165$ .

An examination of the rates of sickness as given for the Rural Districts will shew that it fluctuates up to the age of 32, and that from that age upwards there is a uniform and gradual increase. In the Town Districts the rate of sickness will be found subject to a similar increase from the age of 27 upwards; and in the City Districts the rate increases throughout the whole range of the Table. A comparison will shew a higher rate of sickness in the Town than in the Rural Districts, for the whole period of life. The rate of sickness in the City Districts will also be found higher than in the Rural Districts, from 23 to 63 years of age; it then continues at a lower rate up to the age of 75, when it again rises, and continues higher till the end of life. In the City Districts, from the age of 24 to 44, the sickness is also higher than in the Town Districts; but from 45 to 57 the rate in both Districts differs but little. After 57 years of age, to the end of life, there is a much higher rate of sickness in the Town than in the City Districts. The following Abstract of Table I. will give a

general view of the relative amount of sickness in the various Districts.

Age.	Average Sickness per Annum to each person—expressed in Weeks.			
	Rural Districts.	Town Districts.	City Districts.	The Three Districts combined.
20	·8387	·8564	·5659	·8398
25	·8630	·8649	·9650	·8744
30	·8753	·8794	1·1059	·9107
35	·8991	1·0114	1·2372	·9836
40	1·0677	1·2669	1·4663	1·1808
45	1·2587	1·8323	1·8125	1·4931
50	1·5896	2·5559	2·3831	1·9603
55	2·3260	3·3029	3·3036	2·7047
60	3·8531	4·9132	4·4973	4·1657
65	7·6305	9·1387	5·9019	7·7501
70	14·1949	15·4995	9·9610	14·0391
75	20·7848	24·0134	22·3864	21·4661
80	24·3545	32·9841	35·2065	26·9405

Sickness will be found to follow to some extent the same law with regard to the influence of locality, that is observed to connect itself with mortality; being least in the Rural Districts, and increasing in amount in the other Districts; but it will be seen that the relation of cause and effect generally supposed to exist between sickness and mortality is not here manifested—in fact, the highest ratio of sickness is sometimes found associated with a favourable rate of mortality. In order to shew, however, the merits of this hypothesis for the general results of the Three Districts, an Abstract is subjoined shewing the increase per cent. in the rate of mortality in the Town and City Districts above the Rural, also the increased rate of sickness in the same Districts at the corresponding ages.



Age.	Increased Mortality per Cent. above the Rural Districts in the		Increased Sickness per Cent. above the Rural Districts in the		Age.
	Town Districts.	City Districts.	Town Districts.	City Districts.	
20	27·6008	12·7200	2·1104	32·7650	20
30	5·4852	30·5204	0·4684	26·3338	30
40	20·4517	75·7842	18·6560	37·3419	40
50	35·5833	61·6666	60·7220	49·9182	50
60	51·5277	41·0185	27·5130	16·7200	60
70	43·2990	26·7248	9·1906	29·8191	70

In addition to this, abundant evidence, illustrative of this point, is furnished out of the present materials. For example, labourers, although influenced by the most favourable rate of mortality, are found to be subject to as high an amount of sickness as the general average; and so are some other occupations, in which the rate of mortality is favourable, found subject to a rate of sickness much above the average.

Again, the sickness among the sixteen trades referred to in pp. 58, of Third Edition of "Contributions to Vital Statistics," is less than the general average, although, as therein shewn, they experience a greater mortality. Bakers also, at the early and middle periods of life, are less subject to sickness than the general average, and among them there is likewise a higher mortality. The class of Butchers seems to experience a very high rate of mortality, although not subject to above the average amount of sickness. In applying the test of mortality to various localities and employments there is no difficulty; but the case is very different in viewing sickness as an index of the sanitary condition of any trade or of any locality. What constitutes sickness in one case, is often a very different thing from that in another. The standard seems too indefinite and capricious; and although the results as obtained may be considered perfect for all the purposes of Friendly Societies,



a careful inquiry will shew their vague nature for medical and other scientific purposes, unless carried further than the mere amount of sickness, without regard to the circumstances under which it has taken place, and the causes producing it. Taking two occupations—Tailors and Clerks—which happen to be of readiest reference, they are found subject to a very high rate of mortality; still they do not seem, particularly Clerks, to be subject to so much as the average amount of sickness; and on consideration of the nature of those employments, it will immediately suggest itself, that the same trivial circumstances which would be sufficient to disable Sawyers, and also Colliers and Miners, would have little effect on those following quiet occupations. Sawyers, Colliers, and Miners are subject to accidents and various injuries which cannot be considered constitutional disease or sickness; yet it entitles them to relief from Benefit Societies, and they will of course be returned on the sick list. Tailors and Clerks are less subject to those accidents, and accordingly their sickness is also less; the other classes, particularly Colliers and Miners, being much above the average.

But the most striking refutation of the theory, that sickness and mortality bear the relation to each other of cause and effect, will perhaps be derived from a comparison of the general results of mortality in Friendly Societies in England for all districts combined, with that for Scotland. The result of this comparison will be, that the rate of mortality in Scotland among the members of Friendly Societies is found to be much higher than among the same class in England; and if the theory just recited were to hold good, there should also be found a greater amount of sickness in Scotland; but an examination of the question shews that such is not the case, and that instead of there being an increased ratio of sickness, the ratio is actually below that in England. Nothing further, therefore, need be said on

this part of the subject; but the argument may be rendered more obvious by an inspection of the following Abstract, in which it will be seen that while the excess of mortality is uniformly against Scotland, the excess of sickness is as constantly against England.

Age.	Mortality per Cent. in		Excess of Mortality in Scotland per Cent.	Average Sickness yearly in		Excess of Sickness in England per Cent.
	England.	Scotland.		England.	Scotland.	
30	·7563	·7926	4.7997	·9107	·8376	8.0268
40	·9386	1.0767	14.7134	1.1808	·9767	17.2849
50	1.4267	1.5830	10.9538	1.9603	1.8548	5.3818
60	2.5054	2.9096	16.1331	4.1657	3.9423	5.3628

The nature of the information in the original schedules, from which the preceding results have been deduced, relating to the Societies in England would evidently satisfy many speculations as to the cause, duration, and mortality of sickness and disease; but as it is proposed to give in this paper a simple representation of the amount of sickness only in the different districts, all inquiries, however interesting and instructive, as to the ratio of sickness to mortality, under the various circumstances which present themselves of employment and disease, must for the present remain untouched.

The next part of the subject naturally arising is, the relation which the average amount of sickness, as developed by this inquiry, bears to the amount of sickness as hitherto shewn in previous sickness Tables.

The only ones published prior to the first edition of "Contributions to Vital Statistics," to which it is deemed necessary in the first place to make reference, are those contained in the Highland Society's Report for 1824, and the Tables given in the highly valuable work by Mr. Ansell on Friendly Societies, and published in 1835 under the

superintendence of the Society for the Diffusion of Useful Knowledge. The following will shew the relative amount of sickness per annum to each person at given ages according to those Tables, and also according to the results of the present inquiry.

Age.	Annual Amount of Sickness to each Person—expressed in Weeks.				
	Highland Society.	Ansell.	Average of all England. Table I.	Excess per Cent. above Highland Society.	Excess per Cent. above Ansell.
20	•575	•776	•840	31•5476	7•6190
30	•621	•861	•911	31•8331	5•4884
40	•758	1•111	1•181	35•8171	5•9272
50	1•361	1•701	1•960	30•5612	13•2142
60	2•346	3•292	4•166	43•6869	20•9798
70	10•701	11•793	14•039	23•7766	15•9983

The remarkable increase in the amount of sickness, as shewn by the present results, beyond the other two Tables, will no doubt appear very startling to those not intimately familiar with the condition of Friendly Societies throughout the country. The rate of sickness as given in the Table of the Highland Society has been long and generally acknowledged to be much below the actual average, and even so far back as 1825 it was thought unfavourably of by a Committee of the House of Commons. It is unnecessary to enter into the objections against the nature and source from which the data for the Highland Society's Table were obtained, as that subject has been amply discussed elsewhere. For some time after Mr. Ansell's work appeared it was thought that contributions calculated according to the increased amount of sickness shewn in his Tables would render Friendly Societies perfectly safe; but instances occur almost daily of societies breaking down, whose contributions approximate to those Tables; and

recently the increased amount of sickness has become so apparent to the members of some of the best regulated societies, that meetings have been held, and reports of a very clear and apposite kind published, pointing to the increased amount of sickness as the cause of their falling condition. A knowledge of circumstances of this kind first led to the present inquiry, the original object of which was simply to answer the question whether Friendly Societies were actually subject to a higher rate of sickness.

Mr. Ansell's data had reference to the five years 1823-27; and it is difficult to account for the difference between his Tables and the present results, unless it be considered that the imperfect manner in which the affairs of Friendly Societies at that period were managed did not allow of so accurate information being then obtained as now, when required by Act of Parliament to make quinquennial returns. In Scotland, at the time even of collecting the data for this inquiry, it was found that quadruple the societies would have filled up schedules in competition for the prizes offered, but were prevented from so doing by the incomplete system in which their books were kept. It is not improbable that the difference of the two classes of results may be partially accounted for by the smallness of the numbers over which his observations extended, as in the aggregate they amount to 24,323 years of life only, or about 5000 persons for a period of five years. If this fact is considered, and at the same time the irregularities which peculiarity of employment and other circumstances have been shewn to produce, it will not be difficult to account for the discrepancy. If the nature of Mr. Ansell's treatise had required an enumeration of these features, it would have been interesting to have traced the cause.

It is not believed that the mere fact of small numbers would, of itself, be sufficient to account for the difference, without at the same time a peculiarity in the combination



of the employments of the persons composing those numbers; for not the least remarkable feature which has appeared in the present inquiry is, the uniformity of the results as to sickness, with even smaller numbers than those included in Mr. Ansell's statement, when all the facts recorded were under similar circumstances as to locality and employment.

In order to give a still further and comprehensive view of the several Tables over periods of years, the following arrangement may be useful.

TABLE II.

*Compare amount of Sickness in various periods of Years according to the Sickness Tables of the Highland Society, the Tables by Mr. Ansell, and the Results of this Inquiry.*

From Age	Amount of Sickness in each period of Years—expressed in Weeks.				
	Highland Society.	Ansell.	Average for the Three Districts. England.	Excess per Cent. over Highland Society.	Excess per Cent. over Ansell.
20 to 40	12·598	17 595	18·6265	32·3652	5·5378
30 .. 50	16·398	22·930	24·7119	32·8775	7·2107
40 .. 60	27·491	35·957	41·8893	34·3723	14·1618
50 .. 70	65·803	81·279	104·3923	36 9650	22·1400
20 .. 60	40·089	53·552	60 5158	33·7545	11·5074
30 .. 70	82·201	104·209	129 1043	28·5841	19·2831
20 .. 70	88·071	112·269	137·8187	36·0965	18·5386

An inspection of the fifth and sixth columns of the above Table will afford the most conclusive evidence of the increased ratio of sickness above that set forth in previous Tables. To those interested in the progress of Friendly Societies the results are highly important, as they will demonstrate the impossibility of permanence in those institutions on their present foundations. Considering the

immense number of those societies which have broken down, it is lamentable to think that so little should have been done to ascertain the real nature and extent of the risks to which they are subject. Under a scientific and amply developed system, those societies would be enabled, at no distant period, completely to remove the cause of nearly all that poverty, distress, and misery, which haunt our manufacturing towns, and fill our workhouses with the working classes of the country; but owing to the imperfect and unstable foundation on which they are at present built, instead of being a help and a support to a poor man, they involve him in those difficulties for which he might otherwise have provided. On becoming a member of such a society, he reasonably looks forward to it as a support for his declining years, and a protection during periods of sickness and disease; but ultimately, at the very time when assistance is required, he discovers that the society has been formed on a ruinous plan, that the increasing years and infirmities of its members have absorbed all its funds, and that those surviving must be thrown destitute on the parish as a public charity.

An inspection of Column 4 of the preceding Table will shew that, in the decennial periods of life from 20-70, the Friendly Societies in England and Wales experience an excess of sickness of from 32 to 37 per cent. above that indicated in the Table of the Highland Society, or an average increase of sickness over the whole of that period of fifty years of 36·096 per cent.; or, in other words, Friendly Societies actually experience about one hundred and thirty-eight weeks' sickness in fifty years, while the Highland Society Table would lead them to expect eighty-eight weeks only.

The ruin of any society, under such conditions, is inevitable. There are many other errors in the rules of Friendly Societies, connected with the various benefits which they

promise, calculated to destroy their schemes; but if it were necessary here to cite instances in which societies have suffered from the simple feature of excessive sickness, abundant instances could be pointed out; and the internal evidence contained in this paper, of the actual rate of sickness experienced by societies in the aggregate, must also prove that individual societies have been sufferers. In illustration of this point, it is impossible to avoid quoting a passage from a very able report, submitted to the Edinburgh Compositors' Society, by a committee appointed to revise the laws. They state, in their report, that the contributions and benefits of the society were regulated by the data of the Highland Society; and, in order to discover whether the experience of the society had harmonised with the original data from which their calculations resulted, an investigation of the actual sickness in the society was made, of which the following is an Abstract:—

Age.	Number of Members.	Actual Sickness in the Society.		Amount of Sickness expected by the Highland Society Tables.		Excess of Actual Sickness.	
		Weeks.	Days.	Weeks.	Days.	Weeks.	Days.
20 to 30	732	979	1	417	0	562	1
30 .. 40	580	863	5	398	1	465	4
40 .. 50	126	191	5	129	3	62	2
50 .. 60	11	12	2	20	4	—8	2
Total...	1449	2047	1	965	2	1081	5

It will thus be seen that the actual sickness experienced by this society has exceeded that contemplated by the Highland Society Tables by no less an amount than 112 per cent.

The following gives the amount of sickness as experienced by this society, and also according to the results of various Tables.



	Weeks.	Days.	Excess of Sickness in Compositors' Society,	
			Weeks.	Days.
Amount of Sickness in Com- positors' Society . . . }	2047	1	...	...
Ditto, Highland Society Tables	965	2	1081	5
Ditto, Ansell's Table . . .	1357	0	690	1
Results as given in this Paper, } City Districts, Table I. . }	1784	0	299	1
Results as developed in this investiga- tion.	Printers	2000	0	47 1
	Colliers	2146	0	—98 5
	and .			
	Miners			

or ninety-eight weeks and five days less sickness in the Compositors' Society than among Colliers and Miners.

It will thus appear, that while there was in the society an excess of 112 per cent. above the Highland Society's Table, and also an excess of 51 per cent. above Mr. Ansell's Table, there is an excess of only 17 per cent. above the results obtained in the present inquiry, for the average of all trades in the City Districts, and 2 per cent. above the general class Printers, which includes both Compositors and Pressmen; but there is at the same time also actually less sickness than among Colliers and Miners by nearly 5 per cent.

It has been shewn that particular trades and employments are subject to different degrees of sickness and mortality, and the importance of this element in considering the health of towns, and the influence of locality on the duration of life, is evident; but in viewing the condition of Friendly Societies, the necessity of considering the peculiar effect of certain trades and occupations must appear to be of vital importance. A most remarkable disparity exists between the rates of sickness prevalent in different places and in different employments, and societies may run the greatest hazard by incautiously adopting each other's regulations or tables; for so great is the distinction which obtains between

the liabilities incurred from members of different trades, that what would be sufficiently safe for one society might completely ruin another. It may seem to some that the excessive amount of sickness experienced by the Compositors' Society may be accounted for by the fluctuation in small numbers, but on reference to the report itself such will not be found to be the case. The facts extend over a term of sixteen years, and the results for the various periods are pretty uniform, and cannot be looked upon as the result of any accident, but must be regarded as a distinctive and proper feature of that trade to which the members of the society belong.

In calculating Tables for the guidance of such a society, it would evidently not be safe to assume the results for the general average of the Country or a given District as a sufficient basis to proceed upon; for, allowing such to be the case, and adopting even the present results as a standard of calculation, there would still be 17 per cent. of the sickness in the above society unprovided for.

Other societies in Edinburgh have also experienced an increased amount of sickness beyond the rates of the Highland Society's Table, although the sickness in those societies has not equalled in amount that of the Compositors' Society. It is stated that the sickness in those societies amounted "on an average to no less than 87 per cent. more than the Highland Society's rate." Considering this statement, from the accuracy of detail in other parts of the same report, to be correct, it seems to be a very remarkable coincidence, that in the City Districts, being that with which those societies should be brought into comparison, there is, according to the results of this investigation, at the same term of life also exactly 87 per cent. more sickness than that given in the Highland Society's Table. From 20 to 60 years of age, according to that Table, there is forty weeks' sickness to each person; but according to the City Districts,

Table I., there is seventy-five weeks' sickness, or 87 per cent. more than given in the Highland Society's Table.

The practical advantage of thus recognising particular districts and occupations is obvious; for had either of the preceding questions been tested by the results for the general average, no satisfactory solution could have been offered. Hence the reason why some Friendly Societies go on prospering, while others, under apparently the same management and scheme, survive but for a short term of years, ultimately to involve their members in ruin when most in need of support.

Having entered so fully into the characteristic features of the Highland Society's Table, in relation to the results of this inquiry, a simple inspection of Table II. will be sufficient to shew to what extent Mr. Ansell's Table is liable to the same objections. At ages 30-70, it will be seen that there is an excess of sickness in the Friendly Societies in England and Wales over Mr. Ansell's Table for that period of forty years of 19.283 per cent. But the inadequacy of his Table as a general guide for Friendly Societies, will instantly appear by making it bear on the results of Table I. for the City Districts, in which, as already stated, the amount of sickness from 21-60 years of age is seventy-five weeks, being an excess over Mr. Ansell's Table, for that period of life, of no less than 41 per cent. The greatest care and discrimination should therefore be exercised in Friendly Societies, not to adopt general results for the guidance of particular classes. The laws of sickness and mortality are under peculiar modifications in each class, and must be developed before any safe practical conclusions can be arrived at, deserving of public confidence.

In connection with the preceding remarks, Odd Fellows will naturally inquire whether the same observations are equally applicable to their own Order or Institution. An

analysis has been made of the Return issued in October 1845, by the Board of Directors at Manchester; and among other important information, there is given the amount of sickness and mortality in the various districts of the Unity during the year 1844. An inspection of the results of this analysis is highly calculated to inspire confidence in the preceding observations, and to shew that the rate of sickness there developed is strictly applicable for the guidance of the Order. As the return by the Board of Directors extends over 3682 lodges, and about one quarter of a million of members, great care has been bestowed on the reduction of the analysis presented in the various parts of this paper, in order that it may be safely relied on as a standard for future reference.

The average age at that period of the members of the Manchester Unity is stated by the Board of Directors to be 32 years, and the gross amount of sickness experienced by 243,122 members, being the average number during the year 1844, was 226,917 weeks, or  $\cdot 933$  weeks to each member. On referring to Table I. it will be found that at age 32 the average sickness per annum is  $\cdot 9250$  weeks,—or, when the necessary correction for the maximum ages is applied in the former case, producing, in both instances, 6 days 11 hours to each member, yearly. It must, therefore, be very gratifying to every one interested in the progress of Benefit Associations for the working and middle classes, to find, that the amount of sickness among the members of those clubs, however variously constituted, shews so near an agreement, and effects almost a perfect realization of a permanent law of sickness.

Again: as to the mortality experienced by the Order, the same conformity to the results herein given will be found to manifest itself. Every previous investigation into the laws of mortality produced the conviction, that the lives of the working classes of the country were of shorter



duration than those of the upper classes, and also of less value than the average results for the whole kingdom ; but here we have a confirmation of the fact, that the industrious workmen of the country experience an increased duration of life.

At age 32, the mortality of males for the whole of England and Wales is one in 95 ; the mortality in the Manchester Unity is one in 106 ; and, according to the results as given in this paper, for all classes in Friendly Societies at age 32, the mortality is one in 128\*. To illustrate further this point of the inquiry, the following Abstract will be useful, being an analysis of the actual results in the Manchester Unity of Odd Fellows for the year 1844.

In explanation of this Table, it may be stated that the Rural District is composed of those places the population of which is under 5000, the Town District of those places the population of which is 5000 and under 30,000, and the City District of such places as have a population of 30,000 and upwards.

TABLE III.

District.	Average No. of Members during 1844.	Deaths of Members.	Deaths of Members' Wives.	No. of Weeks Sickness.	No. of Members out of which		Average Sickness yearly to each Member expressed in Weeks.
					One Member died.	One Member's Wife died.	
Rural, - -	66208	608	434	57795	108·89	152·55	0·873
Town, - -	77070	700	554	70435	110·10	139·01	0·913
City, - - -	99843	978	662	98687	102·09	150·83	0·988
Whole Unity,	243126	2286	1650	226917	106·35	147·34	0·933

During the year 1844 it will be seen that the mortality for the whole Unity was, as already stated, about one to every 106 members ; while for the Rural Districts it was

\* During the five years 1856-60 the average mortality in the Unity at age 32, was one in 118.

one in 109, for the Town Districts it was one in 110, and for the City Districts it was one in 102.

The average amount of sickness to each member during the same year was, for the—

Rural Districts	. . .	0·873 weeks, or 6 days 3 hours.
Town Districts	. . .	0·913   ...   6   ... 9   ...
City Districts	. . .	0·988   ...   6   ... 22   ...
Whole Unity	. . .	0·933   ...   6   ... 13   ...

But according to the results in this paper, the average amount of sickness for the same Districts would be—

Rural Districts	. . .	0·863 weeks, or 6 days 1 hour.
Town Districts	. . .	0·929   ...   6   ... 12   ...
City Districts	. . .	1·148   ...   8   ... 1   ...
Three Districts combined		0·925   ...   6   ... 11   ...

In instituting the above comparison, it should be kept in view that the actual ages of all the members in the Unity during that year are unknown; but as the Directors, in their Report, have stated the average age to be 32, that age has been taken as the point of comparison. For refined purposes, objections can be brought against this step, but for the present illustration it is sufficiently correct. Further evidence will in subsequent pages be given from the experience of more recent years, and in which the ages of members are known.

Considering that the above results from the experience of the Order relate to one year only, it is the more remarkable to find them approximate so closely to the results given in the preceding portion of this paper from facts extending over several years.

It is evident, then, that the Manchester Unity of Odd Fellows is subject to as much sickness and mortality as that shewn in Friendly Societies in England. The evidence thus derived from the working of the Order itself,

should be a sufficient answer to those who have hitherto argued that the favourable circumstances in which the members were placed, exposed them to less hazard than the members of ordinary Friendly Societies. The facts of the case, it will be seen, do not support the supposition. It is therefore obvious, that rates of contribution less favourable than those set forth in the Tables here given, would be unsafe for the guidance of the Order.

Since these remarks were written, the question as to “ Whether the experience of other Friendly Societies in regard to sickness was fairly applicable to Odd Fellow Societies ? ” has undergone much discussion, and assumed a public interest.

The investigation, evidence, and reports published by Lord Beaumont’s Committee of the House of Lords on Provident Associations, Sessions 1847–8, paper No. 126 : and by Mr. Sotheron’s Committee of the Commons, in the Session 1849, paper No. 548, also seem to be chiefly directed to the same question, namely, whether the data published in “ Contributions to Vital Statistics,” were applicable to the purposes of Friendly and Odd Fellow Societies. By the witnesses examined before these Committees on behalf of the Odd Fellows, every species of evidence seems to have been urged to make it appear that the members of such clubs were not so liable to sickness as the members of Friendly Societies generally throughout the country ; and the results of the publication by Mr. Ratcliffe, in the year 1850, acquire, in consequence, an additional interest ; as they exhibit the actual experience of the Order, deduced from carefully conducted observations on the experience of the whole of the members during the three years of 1846–8 ; and they are valuable as testing the speculative opinions of the different witnesses examined by the Committee.

In the concluding portions of the earlier editions of the



present treatise, published in 1845, we find the following remarks :—

One of the most efficient means of awakening attention to the perilous condition of the Order, would be the publication of well digested records of the experience of the various lodges, from the most remote periods of which their books admit; and a proper and skilful analysis of these extensively circulated, could not fail to give birth to much useful conversation and debate, ultimately resulting in important and highly beneficial reforms. Science would also be greatly aided by the facts and testimony of such records, and the literature of the Order acquire an importance in the community not otherwise easily attainable. The expense to each lodge of contributing its experience would be very trifling, while the advantages to the Unity would be immense.

It appears that Odd Fellows have acted on this advice; or, at all events, have followed in the precise course prescribed; for Mr. Ratcliffe, in his Report on the sickness experienced by the Order during the years 1846-8, says :—

The Bristol A. M. C. having empowered the Directors to issue return-sheets, to be filled up by each lodge, containing the initials, trade, and age of every member; and the amount of sickness and deaths occurring during the year; and such resolution having been repeated at the Oxford and Southampton A. M. C.'s, the Directors in accordance therewith sent return-sheets to every district, to be by them forwarded to lodges, and the same have been duly completed and returned back to them, and form the first means ever taken by the Manchester Unity to ascertain the amount of sickness and mortality experienced by the Order. In going through such returns, I am of opinion that every attention has been paid to forward them as correct as possible; and having an opportunity, when calling upon districts to fill up the returns for the lists of lodges, to call upon them to give me the age and number of deaths that had occurred during the same year, I availed myself of that opportunity of doing so, and these returns having been collected from different and independent sources, and perfectly agreeing with the returns received from Lodges, is a sufficient proof, if any was required, of the correctness of such returns.

The following gives a succinct view of the data from which the results in the "Contributions to Vital Statistics," and also those of the Odd Fellow Societies are derived :—

TABLE IV.

SICKNESS FOR QUINQUENNIAL TERMS OF LIFE ACCORDING TO							Age.
DATA FOR ENGLAND, <i>According to "Contributions to Vital Statistics."</i>			ODD FELLOWS' DATA*.				
	Population.	Sickness.	Average Sickness Yearly.	Population.	Sickness.	Average Sickness Yearly.	
21 to 25	106743	91419.850	8564	93222	67095.278	7046	21 to 25
26 .. 30	170241	153465.139	9014	153133	117185.709	7652	26 .. 30
31 .. 35	188030	173933.855	9248	138355	119097.563	8607	31 .. 35
36 .. 40	177441	190179.711	10718	109238	106872.707	9783	36 .. 40
41 .. 45	142411	191443.567	13443	58483	71784.849	12274	41 .. 45
46 .. 50	114085	195891.714	17185	38878	55048.706	10249	46 .. 50
51 .. 55	81131	188482.281	23231	12632	27738.852	21959	51 .. 55
56 .. 60	57126	187222.283	32773	5120	17837.850	34839	56 .. 60
61 .. 65	34173	187894.567	54983	1871	10787.422	57655	61 .. 65
66 .. 70	21655	240976.141	111279	700	4848.564	69265	66 .. 70
71 .. 75	11420	210195.995	184056	206	2790.567	135464	71 .. 75
76 .. 80	5626	146594.853	260566	63	1041.708	165349	76 .. 80
81 .. 85	2002	56589.711	282665	24	600.855	250356	81 .. 85

\* In the following pages the results for the experience of the five years 1856-60, will be found in Table XX. page 25 of Odd Fellow Returns.

It will be observed in the above figures that the rate of sickness at the earlier and more advanced periods of life is less, according to the experience of Odd Fellow Societies ; in the middle period of life the difference is very little ; and in the ten years, 56-65, the rate of sickness is higher than that given in the "Contributions : " and in reference to the differences existing between the two classes of results at the younger and older ages, there is a sufficient explanation to shew that they are due to accidental causes, and do not constitute any essential feature of difference depending on physical or social conditions peculiar to either class of results. An inspection of column 5 preceding, will shew that in the data connected with the Odd Fellow experience the numbers under observation after the age of 65, are much too limited to admit of any results derived therefrom being safely relied on. In the term of life 66-70, the whole experience is confined to 700 years of life, or observations on about 233 members for a term of three years. Again, in the next quinquennium, the experience is limited to about 69 members only for the same period ; and in the decennial term following, the whole experience does not embrace more than about 29 members—numbers obviously so small that it is impossible to place any reliance on the results. On the other hand, the data from which the results of the "Contributions " are derived for the corresponding terms of life are upwards of forty times the magnitude. It is therefore very much to be regretted that Mr. Ratcliffe should have allowed so very inadequate data to enter into any of the monetary Tables representing the contributions to provide sickness for the whole of life ; or should have employed his data even beyond the age of 65, as the monetary expressions are those most likely to be questioned and reasoned upon by the members, who may thereby be led into serious errors.

There is another feature in the Odd Fellow results for

ages under 35 or 40, which requires observation. The Manchester Unity of Odd Fellows, is under its gigantic numbers, of but recent and of most rapid growth. In the year 1834, the number of members was about 60,000, and in the beginning of the year 1846, the time to which the data now collected relates, the number of members was 251,727, being an increase during the twelve years of about 19,000 yearly; but in consequence of the dimissions from the Unity, the number of new members has been much greater. The Directors say, in one of their Reports, that “ The amount of initiation money which was received from “ members in 1844, being no less a sum than £49,382, it “ will be discovered, on reference to the list of lodges, that “ our increase of members in that year was only 21,461, “ and by these returns it is clearly proved that upwards of “ 40,000 members were initiated in 1844; thereby at once “ affirming, that upwards of 20,000 members left the Order “ in one year.” Keeping in view, therefore, the immense influx of young members into the Unity, with the fact that the great bulk of them is under the age of 35, the average age of all the members being at the period to which the data relates, about 32 years, it is obvious that at the younger ages, so long as such a mutation in the list of the members goes on, there must be recorded in the books of the society, and markedly so at the younger ages, a much less amount of sickness than the very same persons would be subject to under the usual quiet and permanence of the members of Friendly Societies in general\*. This remarkable fluctuation in the body of members of the Order, occasioned by the very extraordinary number of withdrawals, and the still more extraordinary augmentation of the numbers again by the admission of new members, although greatly to be regretted, as depriving the Institution

\* This will be clearly seen in a subsequent part of this Paper.

of what, under happier circumstances, would be its greatest recommendation, that of cultivating among its members settled habits of prudence and forethought, is nevertheless, so long as such disturbing causes exist, calculated to reduce its liabilities very materially, and especially, recruiting the ranks with healthy and vigorous members, at the younger ages, will shew at these terms of life, a diminished ratio of sickness. However, after the age of 35 or 40, the effect of this selection or influence will not be so visible, if it does not entirely disappear. A striking illustration of this is observable, by comparing the results of the Odd Fellows, and of the data in this paper between the ages of 40 and 65, in which the coincidences of the two rates of sickness is certainly remarkable, considering the very different sources of the data, and the different circumstances under which they were collected.

TABLE V.

From Age	Amount of Sickness experienced in passing through the following terms of life, expressed in weeks, according to the results of		
	The "Unity."	"Contributions to Vital Statistics."	Difference per Cent.
60 to 65	27·2239	27·0894	— 0·49
50 .. 60	26 1073	26·6338	+ 1·97
50 .. 65	53·3312	53·7232	+ 0·72
45 .. 65	61·1277	62·0334	+ 1·46
40 .. 65	67·0746	68·5131	+ 2·08

The preceding Table will suffice to convey a general idea of the results now given to the public by Mr. Ratcliffe, and their relation to those of preceding inquiries. In his interesting volume there are many subjects of importance treated, but there is only space for a very few further remarks, connected with sickness peculiar to different occupations. The results are given for 26 different trades, but the number under observation in the



majority of groups is so small, that it is surprising Mr. Ratcliffe should have thought so limited data of importance enough to induce him to calculate an independent series of results for each. The following are the only groups of sufficient magnitude to deserve attention :—

Occupation.	Aggregate amount of Sickness experienced in passing through the following periods of life.	
	From Age 30 to 40.	From Age 40 to 50.
Blacksmiths . . . . .	8.5676	13.2624
Bricklayers, Plasterers, & Slaters	8.8554	12.8471
Carpenters . . . . .	9.0781	10.8080
Agricultural Labourers . . .	10.1360	14.1457
Town and City Labourers . .	10.7897	14.9163
Mill Operatives . . . . .	7.2435	12.0533
Miners . . . . .	15.6215	25.5730
Plumbers, Painters, & Glaziers.	8.6707	17.7194
Servants . . . . .	7.5761	10.4663
Shoemakers . . . . .	8.0200	12.0715
Spinners . . . . .	9.4789	18.4460
Stonemasons . . . . .	11.2959	16.4316
Tailors . . . . .	9.6825	12.0638
Weavers . . . . .	10.5768	13.9304

The preceding figures are sufficient to shew the remarkable influence of particular occupations on the amount of sickness; but the difference shewn by the above results is evidently, to some extent due to the fluctuation of small numbers, and cannot be taken as a true criterion of the sanitary condition of the different trades. Still, there can be no doubt but that occupation is a most important element, and should be kept closely in view by those connected with the formation and management of Friendly Societies. The neglect of this important consideration in the establishment of these Provident Associations, and the application of average results only, has frequently been the cause of their ruin.

Mr. Ratcliffe, at page 36 of his publication, has the following important remark on this subject. “It must be

“ apparent that these lives will be existing under very  
 “ different circumstances, and be affected by a different  
 “ combination of trades. Mr. Neison’s agricultural labourers  
 “ form 33 per cent., and in the experience here given, they  
 “ form only 20 per cent. of the rural class ; and if a larger  
 “ per centage of similar trades, experiencing more than  
 “ the average sickness, be combined in one more than in  
 “ the other class, there will appear more average sickness  
 “ existing in the first than in the other class, from not  
 “ having that larger per centage of those trades,—other  
 “ circumstances being similar.” Also, “in addition to being  
 “ affected by a different combination of trades, the average  
 “ sickness will vary according to locality. The persons  
 “ resident in Glasgow and Liverpool, for example, ex-  
 “ perience such an average amount of sickness that, by  
 “ being included in the City Districts, the bulk shews an  
 “ excess of aggregate sickness (between the ages of 20–70)  
 “ of 9·4416 weeks over the same class of Mr. Neison’s ;  
 “ but, by being abstracted, the remaining portions shews  
 “ a much less aggregate sickness than the one just named.”

These observations prove how very needful it is to be  
 careful in drawing conclusions from isolated observations ;  
 and that on nothing but extended experience, carefully  
 analysed with a strict regard to all the circumstances  
 connected with the data, can any reliance be placed. The  
 results now submitted to the public as the experience of the  
 “ Manchester Unity of the Independent Order of Odd  
 “ Fellows,” can only as yet be regarded as an approxima-  
 tion to what, under a more settled and permanent state of  
 the Institution, will be the average rate of sickness ; and  
 it would be only prudent for the directors and others taking  
 an active part in its affairs, not to discard other data, but  
 to regard their own more as an indication of the features  
 peculiar to themselves, than as an ample and satisfactory  
 body of facts by which they should be implicitly guided.



From the results now presented in connection with the working of the Order itself, it is plain that there exists no better foundation on which the members can base their calculations than the data and facts given in “Contributions to Vital Statistics;” as the practical experience of the Unity is not only a confirmation of the laws of sickness and mortality therein developed, but almost an actual assimilation with them, and, so far as practical legislation is concerned, one might be used for the other. Admitting this, it will hence follow, that the money tests hereafter given and derived from the data in this paper, are equally applicable to the guidance of the Order of Odd Fellows; and any one objecting to a proposition to establish the Institution on a rate of contributions equivalent to the results of those data, must carry his objections much further, and object to the data themselves; but as it has been shewn that to object to the data would be to deny the experience of the Order, no such objections can be raised, and therefore the money tests and values to be hereafter presented will remain indisputable.

The folly of relying on limited observations for the guidance of any individual society or lodge, may be further proved from illustrations to be hereafter given, in which it is shewn that the sickness in some trades differs widely; and when numbers are small, there must, of necessity, be also peculiarity of employment, and consequently a peculiar series of results. The same principle is disclosed by the facts set forth in the preceding Abstract, and in Appendix A of the Report by Lord Beaumont’s Committee, Session 1847–8, Paper No. 126, which should be most carefully studied by those connected with the practical management of Friendly Societies. The following facts are also curious, and deserve the closest attention. In a Report made by Mr. Yeats in 1847, on the affairs of a Friendly Society in Aberdeen, the following statements are found :—

Age.	Number of Free Members on the Fund, from Oct. 1832, to Oct. 1846.	Years of Life during which the Society was liable for Sickness Allowances.	Amount of Sickness expected for the time during which the Society was liable.	Amount of Sickness actually experienced. (Seven days per week.)
		Yrs. Qrs.	Weeks.	Weeks. Days.
Under 21	7	13 3	9·887	16 3
21 .. 25	59	113 2	82·316	47 1
26 .. 30	95	213 2	162·440	159 0
31 .. 35	94	225 1	182·863	303 1
36 .. 40	76	208 3	187·166	183 3
41 .. 45	38	110 0	116·591	257 1
46 .. 50	14	40 3	59·433	91 0
51 .. 55	16	15 1	31·261	8 6
56 .. 60	1	4 0	10·360	0 0
Totals, .	400	944 3	842·317	1066 1

“ From the above it will be seen, that the actual experience of sickness has considerably exceeded the expected amount. The excess is 20·994 per cent.”

“ The excess of the actual experience of the society, above the Table in the Highland Society’s Report, is 36·795 per cent.; the total amount of sickness according to which would have been only 673·854 weeks.”

“ The latest published Table of the Rate of Sickness in Scotland is that contained in ‘ Contributions to Vital Statistics,’ by F. G. P. Neison, Table V. The amount of sickness, according to that Table, would have been 885·202 weeks, so that the experience of the society exceeds that in Neison’s Table by 16·034 per cent.”

“ The experience of the society is indeed on a limited basis, embracing only 400 members, who have collectively been exposed to the risk during 944 years of life, and no certain conclusion can be drawn from it; but the fact of there being an excess so considerable in amount, taken in connection with the fact, that wherever accurate observations have been made, the same tendency has always been manifested, ought to lead to watchful care and caution.”

Again, at p. 29 of the Report made by the Second Quinquennial Committee of the Glasgow Thistle and Rose Society, columns 2 and 4 of the following Table are found.

TABLE VI.

*Average Yearly Sickness and Mortality in the Thistle and Rose Society, from December 1810 to December 1840.*

Age.	Sickness experienced in		Mortality experienced in	
	Thistle and Rose Society.	Friendly Societies, England and Wales. Table E*.	Thistle and Rose Society.	Whole Population of England and Wales. Table C*.
25 .. 30	·2178	·9014		
30 .. 35	·6850	·9248	2·4650	1·063
35 .. 40	·6467	1·0718	1·4550	1·157
40 .. 45	1·1930	1·3443	1·4779	1·319
45 .. 50	1·9702	1·7185	2·0685	1·560
50 .. 55	1·7951	2·3231	3·5256	1·935
55 .. 60	2·9619	3·2773	3·3333	2·529
60 .. 65	·5357	5·4983		

In regard to sickness, the following shews the average ratio per annum to each member, according to the actual experience of the Thistle and Rose Society, the Aberdeen Society, and the average for Friendly Societies in England and Wales.

TABLE VII.

Age.	Average Sickness yearly to each Member, expressed in weeks, according to the experience of the		
	Thistle and Rose Society.	Aberdeen Society.	Friendly Societies in England and Wales. Table I.
25 to 30	·2178	·742	·9014
30 .. 35	·6850	1·346	·9248
35 .. 40	·6467	·879	1·0718
40 .. 45	1·1930	2·337	1·3443
45 .. 50	1·9702	2·233	1·7185
50 .. 55	1·7951	·555	2·3231

\* "Contributions to Vital Statistics," Third Edition.

It is hence obvious that, although the members of the Thistle and Rose Society are resident chiefly in the City of Glasgow, they are subject to a remarkably low rate of sickness, while, according to the results for the Aberdeen Society, the rate of sickness is even higher than that for England and Wales by 16 per cent. It will also be observed that there is a striking illustration in the Thistle and Rose Society of a high rate of mortality, and a very low rate of sickness, while in the Friendly Societies of England and Wales the sickness is much higher, and the mortality lower. If reference be now made to the facts given in Mr. Ratcliffe's analysis of the Odd Fellow Sickness, he will be found to state, at p. 36, that "In addition to "being affected by a different combination of trades, the "average sickness will vary according to locality; the "persons resident in Glasgow and Liverpool, for example, "experience such an average amount of sickness, that, by "being included in the City Districts, the bulk shews an "excess of aggregate sickness of 9·4416 weeks over the "same class of Mr. Neison's, but, by being abstracted, the "remaining portion shews a much less aggregate sickness "than the one just named," but, at p. 135 of his work, the results of the sickness for the Odd Fellow Lodges in Glasgow are furnished, and in the following Abstract that amount of sickness will be found contrasted with the results for the Thistle and Rose Society in the above city:—

TABLE VIII.

Age.	Amount of Sickness experienced in passing through the following periods of life, according to		
	Odd Fellow Societies, Glasgow.	Thistle and Rose Society, Glasgow.	Excess per Cent. of Odd Fellow Society above the other.
20 to 30	8·9107	6·847	30·140
30 .. 40	14·3855	6·421	125·284
40 .. 50	23·6009	16·135	46·272
20 . 50	46·8971	29·403	59·498



The preceding results are certainly most curious, and cannot fail to occasion to those who seriously consider and study the subject, many important and interesting reflections on the state and condition of Friendly Societies. After a careful examination of the preceding facts, it will immediately appear to every intelligent observer, how very difficult must be the task of advising Friendly Societies and Odd Fellows lodges on the graduation of the scales to be adopted, under the peculiar circumstances of each lodge or society. It has always been a difficult matter to contend against the disposition which has long existed for the adoption of a uniform scale for all societies indiscriminately; even the two Committees referred to of the Houses of Parliament have shewn a strong tendency in that direction, and nothing short of the production of the most striking examples of the failures and dangers of such a course could have prevented the adoption of model Tables, to be used as applicable under all circumstances. It is, however, now abundantly evident, that the circumstances under which different societies are placed, are of such a nature as to cause the most striking differences in their liabilities, and it is only a close and laborious study of the subject, which will qualify any one to give advice to the managers of them on the questions of most vital importance to their stability and permanency. The facts given by Mr. Ratcliffe for the Odd Fellows lodges in the City of Glasgow, do not extend beyond the age of 50, and, therefore, the comparison between them and the results of the Thistle and Rose Society, must be limited to that age; but so far as respects the rate of sickness in the Thistle and Rose Society itself, there is a curious circumstance, which it is important to describe for the benefit of those connected with the management of Sick Clubs, as proving how many causes affect the prosperity and liabilities of these societies, and how essential it is that all those elements should be well under-



stood, before pronouncing on their state or condition. The following shews the amount of sickness experienced in passing through different periods of life, deduced from the actual experience of the society, from the year 1810 to 1848, contrasted with the results of Friendly Societies in England and Wales generally, as given in Table I.

TABLE IX.

Age.	Amount of Sickness experienced in passing through each period of life.		
	England & Wales.	Thistle and Rose Society.	Difference of Sickness per Cent. in the Thistle and Rose Society.
20 to 30	8·7145	6·8468	— 27·278
25 .. 35	9·2123	7·9468	— 13·408
30 : 40	9·9120	6·4205	— 54·380
35 .. 45	11·7519	9·8710	— 19·055
40 .. 50	14·7999	16·1349	+ 8·274
45 .. 55	19·4607	25·8203	+ 24·630
50 .. 60	27·0894	41·7634	+ 35·136
55 .. 65	42·5727	56·5032	+ 24·654
60 .. 70	77·3029	107·0837	+ 27·811
20 .. 55	44·5769	45·5842	+ 2·210
55 .. 70	93·2418	132·6651	+ 29·716
20 .. 70	137·8187	178·2493	+ 22·682

There is here a very remarkable feature disclosed in the rate of sickness by which the above Society is influenced ; in each term of life under 40, the rate is uniformly and very largely under that for England and Wales, but above that age the difference is in the opposite direction. The sickness between ages 20-40, in England and Wales, exceeds that of the Thistle and Rose Society by 40·4 per cent., but from ages 40-70 falls short of it by 28·2 per cent. Again, between ages 20-55 the aggregate sickness differs by 2·2 per cent., but in the fifteen years 55-70, the excess of sickness in the Thistle and Rose Society is about 30 per cent., and over the whole term of fifty years 20-70, the excess of sickness is 22·682 per cent. Hence, although

the aggregate sickness in this society exceeds that of the average of societies in England and Wales, it is obvious that rates or scales of contributions and benefits, graduated according to the data for the kingdom at large, would be quite unsuited for this Society or for any other, subject to a like peculiarity in the law of sickness. The greatest care and judgment are therefore necessary to discriminate the nature and extent of the sickness to which societies are subject. General results can only be useful for general purposes, but may lead to the most disastrous consequences if applied indiscriminately to individual societies.

The affairs of this society appear to be managed with great skill and judgment, and although it cannot, either in respect to the number of its members, or the amount of its funds, be considered of equal importance to many societies in England, there is no society south of the Tweed conducted with more intelligence, nor furnishing more useful and valuable annual reports, which appear to be quite models for imitation by other societies.

In 1848 a very interesting report was made by Mr. Ansell, on the state of a large Friendly Society, established in an agricultural county in the East of England. The history and circumstances connected with this society are remarkable, and calculated to throw considerable light on the causes which frequently lead to the dissolution of Provident Institutions, shewing in a striking manner the danger of estimating from average results the liabilities of individual societies, even when established on an extensive scale.

From the records of this same society, it will be found that the amount of sickness experienced by the members is very high, and is well calculated to shew, not only to Odd Fellows, but to Friendly Societies in general, the necessity of carefully viewing all the elements likely to affect their interests, and to prevent them from placing confidence in either isolated observations or aggregated general results:—

TABLE X.

*Sickness experienced by the Male Members of the "Essex Provident Society," from its foundation in 1828, till the year 1847.*

Age.	Number of Years in which Members were exposed to risk of Sickness.	Sickness.		Average Sickness according to "Contributions," for England and Wales.	Excess of Sickness in the Essex Society, over England and Wales.	
		Gross Amount experienced in Weeks.	Average Yearly to each Member.		Difference.	Difference per Cent.
14 to 20	4926·50	5845·354	1·187	..	..	..
21 .. 25	9478·25	12234·286	1·291	·8564	+ ·4346	+ 50·75
26 .. 30	9464·50	12734·858	1·346	·9014	+ ·4446	+ 49·32
31 .. 35	7481·00	10765·571	1·439	·9248	+ ·5142	+ 55·60
36 .. 40	5494·75	8430·001	1·534	1·0718	+ ·4622	+ 43·12
41 .. 45	3941·25	6747·428	1·712	1·3443	+ ·3677	+ 27·35
46 .. 50	2783·00	5067·143	1·821	1·7185	+ ·1025	+ 5·96
51 .. 55	1413·50	4504·144	3·229	2·3231	+ ·9059	+ 39·00
56 .. 60	399·50	1945·286	4·869	3·2773	+ 1·5917	+ 48·57
61 .. 65	120·50	497·143	4·126	5·4983	- 1·3723	- 24·96
66 .. 70	32·00	510·999	15·969	11·1379	+ 4·8411	+ 43·50
71 .. 72	2·50	21·286	8·514	..	..	..
Total, . .	45537·25	69353·499	1·501	..	..	..

In 1843 the society had 5500 subscribing members, but at the period at which the above observations close, there were 6146 members, while the gross number of years of life to which members were exposed to the risk of sickness was no less than 45537·25 years, consequently, as the data have been collected from the experience of twenty years, the results may be considered to fairly represent the liabilities of any Friendly Society the members of which are similarly circumstanced to those in the Rural Districts of Essex. The rate of sickness, it will be seen, exceeds that of Friendly Societies generally in England and Wales by upwards of 40 per cent. If, therefore, in constructing Tables for such a society, or in estimating its liabilities, an actuary were to be guided by the rate for the whole kingdom, or for any one of the districts set forth in this paper, or in the similar districts of the Odd Fellow results recently published by the Unity, it is obvious that a most fatal error would be committed. The greatest care and judgment are consequently required, both in establishing Friendly Societies, and in remodelling existing ones, to ascertain the precise rate of sickness peculiar to the circumstances of the case, as nothing could be more fallacious and contrary to all experience and correct observation, than the application of a general rate of sickness indiscriminately to all societies.

As already stated, Appendix A of Lord Beaumont's Committee, Session 1847-8, Paper No. 126, will be found to contain some remarkable examples of the different rates of sickness to which societies are subject; but an interesting contrast to the result of the Essex Provident Society will be found in the experience of the Wilts Friendly Society. They resemble each other very much in respect to the rural character of the districts over which the two societies are distributed, but in the ratio of sickness experienced by them the difference is very great. Both societies

were established in the same year, 1828—both societies are widely spread over districts almost purely agricultural, and both societies contain a large number of members. The following shews the rate of sickness experienced by the male members of each society :—

Age.	Rate of Sickness expressed in weeks, experienced by the		
	Essex Society.	Wilts Society.	Difference per Cent.
21 to 25	1·291	0·743	72·409
26 .. 30	1·346	1·071	25·677
31 .. 35	1·439	0·929	54·897
36 .. 40	1·534	0·743	106·461
41 .. 45	1·712	0·486	252·263
46 .. 50	1·821	0·600	203·500
51 .. 55	3·229	0·843	283·036
56 .. 60	4·869	0·771	531·518
61 .. 65	4·126	1·929	113·893
66 .. 70	15·969	2·285	598·652

The following two examples will also shew, in a striking manner, the ratio of sickness experienced by two other Societies circumstanced very similarly in dense City Districts.

Age.	Ratio of Sickness yearly to each person, expressed in weeks, experienced by		
	Liverpool Friendly Society.	Old Provident Society, Leeds.	Difference per Cent.
21 to 25	·89	·18	79·78
26 .. 30	1·28	·38	70·31
31 .. 35	1·31	·58	55·72
36 .. 40	1·60	·66	58·75
41 .. 45	1·93	·87	54·92
46 .. 50	2·54	1·74	31·50
51 .. 55	3·96	2·60	34·34
56 .. 60	3·95	2·32	41·27
61 .. 65	6·74	5·84	13·35
66 .. 70	21·96	10·90	50·37



The difference in the preceding results is certainly very remarkable, and must satisfy every inquirer as to the danger and disastrous consequences which must follow the application of uniform tables to all Societies. It is hoped the preceding illustrations will have the effect of preventing members of Benefit Clubs from falling into some of the more prevalent errors in the management of these Institutions. Of late the attention of the noblemen and the more wealthy residents in the English counties seems in an especial manner to be given to the means of elevating the condition of the agricultural and working classes, by the establishment of well-constituted Friendly Societies, and it is hoped the present edition of this treatise will be carefully studied by them.

The evil effects resulting from Tables badly constructed for the special purposes of individual Societies, can with difficulty be seen for some years after their establishment, but in the course of time inadequate contributions begin to tell, in too evident terms, the ruin and calamity which are fast hastening on the Society. A large Society in one of the mining districts of England, which literally subsisted for a period of sixty years, until the very last farthing of its funds was expended, without any efficient steps having been taken for its regeneration, broke down under the awful and melancholy spectacle of having upwards of 300 members, all aged 50 years and upwards, incapable of entering any other Friendly Society, and who had to no purpose contributed to the funds for many years. So dreadful a catastrophe is but of too frequent occurrence, and its appalling aspect is sufficient to destroy in the working man all confidence in the stability of such institutions. However, there are sufficient examples of successful management of other Societies to encourage their affluent and benevolent patrons to increased efforts towards the improvement and perfection of the only

institutions of the country which legitimately and distinctly call for the prudential self-efforts of the millions of the people towards their own regeneration. The following are extraordinary examples of the very different conditions of Friendly Societies established and uniformly conducted under the best intentions and desires for permanent prudential provisions for the members and their families. The different results ultimately arrived at in each Society are most instructive.

According to the valuation made by Mr. Ansell in 1848, for the Essex Provident Society, the results arrived at :—

“ Present value ” of the benefits promised to the members, as- suming that the experience of sickness in the Society was no greater than that indicated by the results of Mr. Ansell’s treatise .	£208458·790
“ Present value ” of future con- tributions . . .	£133517·573
Accumulated capital . . .	33000
	<hr/> £166517·573

Deficiency of the Funds according to Mr. Ansell’s estimate . . .	£41941·217
---	------------

---

But if the liabilities had been valued according to the actual scale of sickness to which the members are subject, the deficiency would be double the above amount. It is certainly very much to be regretted that so unfortunate a state of things should exist, that a Society having been established for so long a period, should not have discovered the fallacious principles by which it is guided. Had the members adopted the plan of having periodical investigations into its affairs, and a valuation of its assets and liabilities by a competent authority, there can be no doubt that the present ruinous mode of proceeding would long

ago have been checked, and a remedy applied ; but now that so many of the members are advanced in life, it becomes exceedingly difficult to devise any satisfactory means likely to be adopted and carried out by the members for improving its condition.

Although such has been the unfortunate progress of the Essex Provident Society, there are others established in the kingdom on very similar principles, which have flourished, and are now in a really very prosperous and promising condition. The following examples, if contrasted with the preceding, will shew that the scale of contributions and benefits under which one Society prospers, another may decay and suffer. In the Hitchin Friendly Society, the following are the results of a valuation made in 1849, of its assets and liabilities :—

“ Present value ” of gross liabilities		£9225	17	0
...	...	assets	9509	4 11
<hr/>				
Difference in favour of the Society		£283	7	11
<hr/>				

The Hitchin Society, like the Essex Provident Society, is in a Rural District, but it is not ramified over a large space and divided into numerous branches. However, the Wilts Friendly Society, has upwards of seventy branches spread over the county, and in this respect resembles the Essex Provident Society, and may therefore be brought into comparison with it. The following are the results of an estimate of its assets and liabilities made during 1850 :—

“ Present value ” of its liabilities		£60610	15	5
...	...	assets	61353	15 8
<hr/>				
Difference in favour of the Society		£743	0	3
<hr/>				

Although the surplus here is but small, still it shews a very different state of things from that which belongs to

the Essex Society, and it is a subject of considerable interest to understand distinctly the cause of this. It has already been seen that the rate of sickness in the latter Society exceeds that for all Societies collectively in England and Wales, by more than 40 per cent., while the rate of sickness in the Wilts Society has actually fallen short of that for the Societies of the Rural Districts of the kingdom, and hence there is, in this fact alone, an important reason for the prosperity of the one Society, and the disastrous condition of the other. These examples should be sufficient to satisfy every inquirer of the difficulties which surround such questions, and the need of judgment and experience being brought to bear on all efforts made to regenerate old societies, or to establish new ones.

Since the preceding observations were written, a Return of the sickness and mortality experienced by Friendly Societies during the quinquennium, ending the 31st of December, 1851, has been printed by order of the House of Commons, in Parliamentary Papers, No. 955 of 1853, and No. 506 of the year 1854. The data embraced by this Return extend to 792,939 years of life, and are therefore, in magnitude, second only to the data originally brought forward in "Contributions to Vital Statistics," which included in one class of results 1,217,783 years of life. The Government Returns therefore contain about 65 per cent. of the amount of experience embodied in the present Work, but not one half the extent of the whole data now brought under consideration. It will be found that the Odd Fellow data are not quite so extensive as the Government Returns ;—they extend to 621,561 years of life.\* The preceding is a condensed Abstract of the Government Returns made from the results given in p. 2 of Parliamentary Paper, No. 955 of 1853.

\* The subsequent Returns, hereafter given in Table XX, page 128, for 1856—60 of the Unity extend to 1,006,272 years of life.



TABLE XI.  
*Sickness and Mortality for Quinquennial Terms of Life according to the Government Returns relating to  
 Friendly Societies in England and Wales.*  
 1846-50.

Age.	SICKNESS.			MORTALITY.			Age.
	Number exposed to the risk of Sickness at each Age.	Total Sickness (in Weeks).	Average Sickness per Annum.	Number exposed to Risk.	Number of Deaths.	Mortality per Cent.	
10	16	20·571	1·2857	16	..	..	10
11 to 15	2939	2115·214	0·7197	2940	16	0·5442	11 to 15
16 .. 20	25087	24470·500	0·9757	25098	169	0·6734	16 .. 20
21 .. 25	88528	86781·071	0·9803	88556	645	0·7284	21 .. 25
26 .. 30	123624	122736·143	0·9928	123684	939	0·7592	26 .. 30
31 .. 35	126330	123377·500	0·9766	126402	1005	0·7951	31 .. 35
36 .. 40	114358	127975·143	1·1191	114458	1087	0·9497	36 .. 40
41 .. 45	94631	118405·786	1·2512	94692	1050	1·1089	41 .. 45
46 .. 50	77550	116491·000	1·5021	77649	1057	1·3613	46 .. 50
51 .. 55	54693	101470·500	1·8553	54778	950	1·7343	51 .. 55
56 .. 60	39974	92677·286	2·3184	40061	1009	2·5187	56 .. 60
61 .. 65	23438	78633·000	3·3549	23496	699	2·9750	61 .. 65
66 .. 70	18398	67801·286	5·0606	18462	648	4·9622	66 .. 70
71 .. 75	5591	47382·071	8·4747	5619	374	6·6560	71 .. 75
76 .. 80	2147	25432·071	11·8454	2163	222	10·2635	76 .. 80
81 .. 85	635	9650·000	15·1969	644	101	15·6832	81 .. 85
Total, . .	792939	1145425·142	1·4445	793718	9971	1·2562	Total.



TABLE XII.

*Average ratio of Sickness per annum during each quinquennium, expressed in weeks, according to:—*

Age.	Table I.		Odd Fellows, Table IV.		Essex Provident, Table X.		Government Returns, Table XI.	
	In each period = (a).	$\Sigma$ (a).	In each period = (b).	$\Sigma$ (b).	In each period = (c).	$\Sigma$ (c).	In each period = (d).	$\Sigma$ (d).
21 to 25	0.8564	0.8564	0.7046	0.7046	1.291	1.291	0.9803	0.9803
26 .. 30	0.9014	1.7578	0.7652	1.4698	1.346	2.637	0.9928	1.9731
31 .. 35	0.9248	2.6826	0.8607	2.3305	1.439	4.076	0.9766	2.9497
36 .. 40	1.0718	3.7544	0.9783	3.3088	1.534	5.610	1.1191	4.0688
41 .. 45	1.3443	5.0987	1.2274	4.5362	1.712	7.322	1.2512	5.3200
46 .. 50	1.7185	6.8172	1.6249	6.1611	1.821	9.143	1.5021	6.8221
51 .. 55	2.3231	9.1403	2.1959	8.3570	3.229	12.372	1.8553	8.6774
56 .. 60	3.2773	12.4176	3.4839	11.8409	4.869	17.241	2.3184	10.9958
61 .. 65	5.4983	17.9159	5.7655	17.6064	4.126	21.367	3.3549	14.3507
66 .. 70	11.1279	29.0438	6.9265	24.5329	15.969	37.336	5.0606	19.4113

In Table XI. there are several features of interest to which it is important to make detailed reference.

It will be observed that between ages 11—40 the rate of sickness is higher than that contained in Table I. but after that age the ratio of sickness is very much less ; and to this circumstance attention is, in the first place, directed ; but in order to understand better the relation between the results of the Government Returns, and those deduced from other inquiries, the preceding Table XII. is submitted.

From the columns headed with the symbol of summation,  $\Sigma$ , it will be seen that the aggregate amount of sickness between ages 21—65 is nearly equal in Table I. and in the Odd Fellow data ; while in regard to the Government Returns it will be found that the aggregate amount of sickness is about equal between ages 21—50 ; but after the age of fifty, in fact, after forty-five, the Government Returns exhibit a greatly diminished ratio of sickness as compared with any of the other Tables now under consideration, and to this feature of the Government Returns it is important to direct attention.

On an examination of the rate of sickness given in the Government Returns, it will be found above the age of 45 very much lower than that of any other recognised Table extant ; it will be further seen that, at the higher ages, the rate of sickness is a close approximation to that set forth in the now discarded Table of the Highland Society, and between ages 65 and 70 is actually about 35 per cent. less than the rate of that Society. It is important to understand the reason of so low a rate of sickness at the advanced ages.

The solution of this strange and remarkable feature will probably be, to a great extent, if not wholly, accounted for by the following passages in the Government Returns themselves.

“ The cases of superannuation were carefully separated from the mass, and subjected each one to a rigid scrutiny to determine whether it was a case of *chronic sickness* or a case of superannuation, in the sense of retirement on a pension for *old age*. Where it was the case of a man under 60 set down technically, and technically only, as superannuated, with a *possibility of his restoration* to health and position as a contributing member, that man's case was classed under the head of sickness ; the principle being to retain as many of these cases in the latter category as possible. The sickness tabulated, therefore, is the whole sickness that could be ascertained to be really such.”—Parliamentary Paper, 16th August, 1853, p. vi.

And again :

“ It is clearly to be understood that although separate cases of sickness, occurring to the same individual during each year, were added together so as to make the Return perfectly accurate, yet that nothing but sickness in the true sense of the word, that is, sickness incapacitating from labour, and *requiring constant medical treatment, and of limited duration*, as contradistinguished from *chronic ailment*, and mere decrepitude, was considered to be sickness. For instance, *slight paralysis, blindness, mental disorder, or senile infirmity*, cannot, it was thought, fairly be classed with the sickness commonly prostrating the workman, and for relief under the visitation of which he seeks the aid of a benefit club. In the abstraction of the data on which the Tables now submitted are founded, all cases of the *above*, or any other description of *chronic malady*, which were returned under the head or term of superannuation, were carefully eliminated, where no cessation of this title to relief, and where no Return to the ordinary conditions under which allowances are drawn in sickness, could be perceived.”—Parliamentary Paper, 12th August, 1854, p. 7.

The preceding is certainly one of the most extraordinary circumstances connected with any inquiry hitherto made, as to the prevalence of sickness in friendly societies. It would seem as if the whole object and purpose for which such societies are instituted were lost sight of. The benefits for which all societies profess to make provisions are, allowances to members during sickness, or rather incapacity, from either physical or mental causes, to follow their usual avocations or labours. It is nowhere a feature of a friendly society to guarantee allowances during temporary sickness only. If this were so, friendly societies and benefit clubs would not be worth supporting, and having such objects only in view, they never could have enrolled the immense number of workmen which now belong to them. The great, essential, and the noblest feature in friendly societies of every description, is the certainty that, under a skilfully developed system, they will afford to members a competent support and independence during periods of sickness, incapacity, and disease, however protracted. The working man, for whom such societies are more particularly designed, may struggle against the difficulties of a temporary sickness without the aid of a friendly society, but few can hope to bear up against the vicissitudes invariably attendant on long protracted or permanent illness, and it is this condition of things for which not only the earliest but the most recently formed societies make special provision : and unless this integral element is allowed to have its full weight, the great principle which should govern every society is violated. It is quite true that, in many societies, even amongst those established of late years, a reduced amount of sickness allowance is granted during long continued sickness ; but in no society worthy of the name does the allowance cease altogether, or fall to even so low a sum as four or five shillings weekly. An industrious



workman with possibly a large family to support on so miserable a pittance, must be reduced to pauperism itself. Friendly societies fail in their mission when, by their rules, they sanction such degradation. At all times, even when science had not taken them under her protection, they aimed at other and nobler purposes than merely to allure the poor man into them for the purpose of ultimately placing him in the workhouse in his declining years, when much of all the sickness is of a permanent, or at least of a very protracted character. Their object is now, and always has been, a higher one. There is no reason why the sickness allowance should ever be reduced under eight or ten shillings weekly : and with such a sum an honourable struggle might be made for existence ; but with less, the charm of independence is broken, and friendly societies become asylums for objects of charity, instead of self-supporting and dignified institutions, elevating the moral and social condition of the people.

If, therefore, the principle of some badly constituted societies of reducing the allowances so very low during long protracted or permanent sickness is to be so strongly condemned, what can be said of the extraordinary circumstance connected with the Government Returns now under consideration, in which all such elements of sickness are left out of the results which are submitted to the country for the guidance of its friendly societies ? Had a scheme been purposely contrived to pauperize the members of all the benefit and provident clubs of the kingdom, it could not be more effectually calculated to do so, than by the dissemination with Government sanction of a ratio of sickness deduced from data, in which so vital elements are excluded as "chronic ailment," "mere decrepitude," "slight paralysis," "blindness," "mental disorder," and "senile infirmity." It will be found that those are the very afflictions which press with unusual severity after



members attain 45 or 50 years of age. It is the proper function of a Friendly Society to enable the many to assist the few, and all properly developed data for the regulation of their risks, should be calculated to make provision for such contingencies and diseases as above enumerated, as well as for all others. It would however seem, as if those entrusted with the preparation of the Government Returns, had an idea that the best constituted Friendly Societies should only provide against “sickness incapacitating from labour, *requiring constant medical treatment*, and of *limited duration*.” There is not an intelligent working member of a benefit club in the whole kingdom, who would subscribe to such a principle. At the superior ages, and long before the time of life when superannuation allowances, or strictly speaking, deferred annuities are granted, there is a large amount of protracted sickness experienced, as will clearly appear from results submitted in the subsequent part of this paper, and if during that period members who are afflicted are to be deprived of all benefit from the funds of their clubs, as the treatment of the Government Returns assumes, they must then be thrown on the charity of the country. The possibility of such a thing is, however, surely incompatible with the scheme of any properly regulated and self-supporting provident institution, and such a character all friendly societies which the Government encourages ought to maintain.

The history of this practice as introduced into many friendly societies, chiefly within the last forty or fifty years, is simply as follows. Societies generally, until quite recently, commenced their career with promising members benefits for which their contributions were wholly inadequate to make ample provision; but with the limited knowledge at one time existing of the laws of sickness and mortality, everything seemed to prosper for many

years, until the members who, for the most part entered such societies young, increasing in years and infirmities, made large inroads on the funds, and then the evils of the bad adjustment of benefits and contributions became apparent. Societies, when in this insolvent condition, soon began to have recourse to every possible expedient, except the right one, to prevent themselves from sinking, and amongst other means of propping up the falling institutions, the members, seeing the great drain on their resources on account of protracted and permanent sickness, very naturally under such circumstances, reduced the amount of the allowances. The reduction was, however, rarely so great as to bring the benefits to less than two-thirds or one-half of the full pay allowance. New societies starting into existence in succeeding years, very generally copied the schemes and regulations of their predecessors, and hence the practice of reduced benefits in long continued sickness. In every instance when the reduced allowance brings the benefit to so low a scale as to be no longer adequate with prudent management to support the member in sickness, he is necessarily thrown on the parish for support, and every such society should be discouraged as wanting in the essential characteristic of a well founded institution.

If, in the analysis of the Government Returns, the elements in question had been eliminated from the general results in order to satisfy scientific curiosity, or otherwise, and if the nature and extent of them had been furnished in another part of the published Report, no objection could have been taken to such a course, but on the contrary, useful deductions might have been drawn from that mode of treating the data : but, unfortunately, these elements have been excluded from the general results, and no record of them is given by which any one can discover the actual amount of sickness to which the various

societies included in the Government Returns have been subject. The consequence is, that practically, the Returns are for all the more important purposes of friendly societies entirely worthless, in fact, from the auspices under which such defective data appear, they are calculated seriously to undo much of the good, and to destroy many of the improvements, effected in the condition of those societies during the last fifteen years,—the period of greatest progress in their history. The evils to be so deeply lamented in the constitution of many societies, from the adoption of the data of the Highland Society, will be but little mitigated, particularly at the higher and more important ages, by taking the data now offered by the Government for their guidance. A Committee of the House of Commons reported unfavourably, so far back as 1825, on the Highland Society's Table; and before Lord Beaumont's Committee of the Lords in 1848, and Mr. Sotheron's Committee of the Commons in 1849, conclusive evidence was adduced as to the dangerous character of the same Table. Since then, the experience of the Manchester Unity of Odd Fellows, and now the Government Returns themselves as decidedly prove the Highland Society's Table to be fallacious, and, as a consequence, demonstrate the inapplicability of the results of the Government data as now analysed for the purposes of friendly societies.

That the exclusion of the elements in question is the cause of the low ratio of sickness expressed by the Government Table, will appear evident from a consideration of the analysis of the data appearing in "Contributions to Vital Statistics." On referring to Abstract D, p. 161 of that work, it will be found that the average duration of each attack of sickness not ending in death, varied from four or five weeks' sickness at the younger and middle periods of life, to from 100 to 300 weeks at the more advanced ages; and, whatever may be the cause of this

prolonged sickness, it equally incapacitates a member from following his occupation, and entitles him to the sickness allowances of his Club\*. The following is a condensed Abstract of the experience of twenty-five Societies over an average period of nearly twelve years each. It will be found full of curious interest and instruction, and is calculated to throw much light on the question now discussed.

It will be observed by the results of the following Table, that from the youngest to the oldest age there is a rapidly increasing ratio of prolonged sickness. From 20 to 50 years of age the number of persons suffering from protracted sickness varies from about  $2\frac{1}{2}$  per cent. to nearly 5 per cent., but after the latter age the increased number of persons liable to diseases of long duration is very considerable, and must tell seriously on the funds of a Society.

TABLE XIII.

*Ratio of Persons suffering from protracted Sickness to the total number Sick at various terms of life. The shortest duration of any one attack of what is termed protracted Sickness being at least One Year.*

Age.	(a) Total Number of Persons actually Sick.	(b) Total Number of Persons suffering from protracted Sickness.	Ratio of (a) to (b).
11 to 20	90	1	1·111
21 .. 30	847	21	2·479
31 .. 40	738	23	3·116
41 .. 50	548	27	4·927
51 .. 60	345	48	13·910
61 .. 70	175	80	45·714
71 .. 80	58	41	70·690
81 .. 90	17	15	88·235
Total, .	2818	256	9·084

\* See subsequent Abstract, page 59.

Between ages 61-70, upwards of 45 per cent. of all the persons sick are attacked with affections which either permanently incapacitate them, or from which recovery does not take place for upwards of one year from the date of attack. It is hence abundantly evident that every Society must make some provision for this class of its members. Even at the term of life 51-60 the protracted sickness is about 14 per cent., and the neglect of a small number of such cases in the analysis of the Government Returns will fully account for results so discordant with every other series of observations. It has already been shewn in Table XII. that at ages under 45 the ratio of sickness is somewhat higher in the Government Returns than according to the results of this inquiry; in fact, the aggregate sickness between ages 21-50 is, as nearly as possible, the same. In the subsequent terms of life, however, the Government Tables exhibit a very reduced ratio of sickness. The cause of this will appear evident from the facts adduced in the preceding Table. "Chronic ailments," "mere decrepitude," "slight paralysis," "blindness," "mental disorder," and "senile infirmity," are affections characteristic of advanced ages, and usually of a protracted nature, and their exclusion must produce results such as those appearing in the Government Returns.

These facts it is believed are quite sufficient to point out the importance of protracted and permanent sickness being provided for in the pecuniary scheme of every properly constituted friendly society, and the danger attendant on the use of data from which elements so important have been excluded.

The following are the results of a combination of the elementary data of some interest, in a form not hitherto attempted, and from which some useful conclusions may be drawn. In the preceding Table the rate of sickness has invariably been regarded in relation to every member



of the society or societies, at the given ages; but in column 2 of the following Table will be found the results of a different combination. All the members, at every year of life, or rather all the members of exactly the same age, being placed in one group, the number of these that had actually experienced sickness during the course of that year of life was recorded. And these being abstracted from the total number of members of the same age, column 2 was deduced, expressing for quinquennial periods of life the per-centage of members that are actually sick in the course of one year; for example, out of every hundred members aged 31-35 in a society, twenty-one will be on the sick list during some part of the year; but of the same number of members aged 61-65, at least thirty-five members will be sick during some period or other of the year.

An inspection of column 2 will shew that, from the younger ages up to the period of life 31-35, the ratio or chance for any given member to be sick diminishes; but that from that period of life upwards, the tendency for any given member to be sick increases in a uniform and regular series. No Table of this kind has hitherto existed; and it is believed, that in addition to the more general purposes of Vital Statistics, it will be practically useful to benefit societies, in enabling them to determine whether the numbers on their sick list be greater or less than the average. Table I. will afford a means to determine whether the total amount of sickness in a society be greater than the average; but the present Table simply points out the proportion of members to be expected on the sick list, and is perhaps more important than the other, as a test of the means of selection adopted for the admission of members.

Column 3 is simply a modification of column 2, and needs no explanation further than to state, that it will

afford a ready means of testing the relation of the sick to the non-sick members in any one year, when placed in separate groups, as is generally done in benefit societies.

TABLE XIV.

Age.	Per Centage of Members Sick during each Year.	Ratio of Sick Members to every 100 not Sick in every Year.	Mortality per Cent. among those Actually Sick.	Sickness per Annum among those Actually Sick.	Total Amount of Sickness to each Death.
21 to 25	22-0386	28-2686	3-0539	3-8518	126-1271
26 .. 30	21-6997	27-7134	3-3271	4-1921	125-9977
31 .. 35	21-0147	26-6058	3-7592	4-3585	115-9411
36 .. 40	21-5471	27-4650	4-0686	4-9463	121-5732
41 .. 45	22-9858	29-8463	4-5306	5-9418	131-1468
46 .. 50	24-6042	32-6333	5-1657	6-8556	132-7123
51 .. 55	27-6422	38-2022	6-2401	8-5104	136-3839
56 .. 60	30-2424	43-3535	7-2732	10-9261	150-2235
61 .. 65	35-5676	55-2015	8-6163	15-1975	176-3808
66 .. 70	46-8493	88-1443	9-6004	24-2217	252-2938

In the Abstract in page 9, the rate of mortality is given for the general population of friendly societies; but in the fourth column of the preceding Table will be found the mortality per cent. among those persons actually sick. The mortality among the population generally has been shewn to increase with age; so also does the mortality among those persons actually sick increase with age.

In the quinquennial period of life, 21-25, the mortality among those sick is 3-0539 per cent.; but in the advanced period of life, 66-70, the mortality is increased to 9-6004 per cent., or more than three times that of the other period. An inspection of this column will shew that there is a uniform and gradual increase of the rate of mortality.

Tables of this kind are calculated to throw important light on the subject of Vital Statistics. A chronological series would point out any change or modification that may have taken place in the intensity and severity of disease. By the aid of the information given in column 4, premiums may easily be determined for the assurance

of lives while actually sick; but as the results in that column do not distinguish sickness under particular diseases, a knowledge of the disease under which the patient might be suffering would be of no assistance to parties undertaking the risk: but if particular diseases, with the sickness and mortality under each, were given in separate classes, then the results would apply to given diseases, in the same manner in which the above results will apply to sickness in general, irrespective of disease. An application of columns 2 and 4 will afford the means of measuring the exact liabilities of a friendly society; and if the same means were available to an assurance company of ascertaining the ratio of its members sick, the principles of determining the liabilities in those companies would undergo an important change.

Suppose that any particular society contains 3647 members, equally distributed over the ten quinquennial terms of life, from 20 to 70 years of age, one thousand of them would be found on the sick list in the course of a year, and of one thousand persons found sick, fifty-six deaths would take place in that year; but if in the actual result the balance of those numbers was in any way disturbed, that circumstance would tend to shew whether the selection of lives in the society was of a favourable or unfavourable character.

Column 5 of the same Table will be found to represent the amount of sickness per annum among those actually sick. From the age of 20 upwards, the amount of sickness increases in a regular and uninterrupted series. At the term of life, 21-25, there is 3·8518 weeks' sickness in a year to each person, but at the term 66-70 there is 24·2217 weeks' sickness to each person actually sick.

Without any further inquiry on this point, the manner in which it will bear on what is called permanent sickness in friendly societies is obvious. It will thus be seen, that

not only have advanced years a greater liability to sickness, but that, once on the sick list, its duration receives a most remarkable increase. It will also be further seen, that at the two terms of life, 21-25 and 66-70, the relative chances of being sick are in the ratio of 220 to 468, while the mortality at the same terms of life is in the ratio of 31 to 96 among those actually sick; and that the amount of sickness to those persons at the respective ages, shews the remarkable disparity of 39 to 242.

The cares, anxiety, and suffering with which the decline of life is thus beset, appear to form a most striking contrast to the improvident carelessness with which, in youth, any provision for those calamities is regarded. "If any man will not work, neither shall he eat;" and as "the time cometh when no man can work," it is in the summer of life that abundant provision must be made for the vicissitudes of that winter which incapacitates for labour; but how mortifying must be the disappointment which falls on the hopes of those patient contributors to friendly societies, who, after thirty or forty years' experience, find, in the decline of life, when thrown by their infirmities on those societies for support, no brighter prospect than the severe and harassing privations of pauperism, or the consolations of a workhouse.

It must be kept in view, that the results given in the whole of Table XIV. will be much influenced by local circumstances and peculiarity of employment, and that it is not to be thought that they can be applied with safety to all societies promiscuously. Considerable experience and discrimination will always be required, to determine the due application of many of the most important practical results here presented.

Perhaps the most curious and interesting part of the preceding Table is column 6, as it presents some remarkable and novel features connected with Vital Statistics.



A careful survey of the figures presented will shew, that although, as age advances, the human constitution has a greater tendency to decay, and greater liability to sickness, still it presents the apparent anomaly of having, in advanced life, a greater power of enduring sickness than in younger life; and that although there is less power to resist the approach of disease, there is a higher capability of sustaining its insidious and destroying agency.

At the period of life 31-35, it will be seen that for every 116 weeks of sickness there is one death; but at the term of life 66-70, there is only one death for 252 weeks of sickness; or in other words, a greater amount of sickness is required to destroy life at advanced ages than at younger ages.

This peculiar feature, which seems to have been unexpected by those giving attention to such subjects, may be explained in several ways. Many of the diseases prevalent in younger life disappear in after years; and, in passing from the diseases peculiar to youth, other diseases ensue, which, although not so acute in their nature, are yet fatal in their results; and thus the change from the acute to the more chronic form of disease will impart increased duration, but not severity, to the sick-list of a society. Again, many fatal diseases of youth, such as Consumption and other Diseases of the Chest, do not, to any great extent, incapacitate from labour; and in those diseases the mortality may be high, while the amount of sickness is small.

Nothing like a proper enumeration of all the practical applications of the preceding Table is here contemplated; but it may not be out of place to refer to a few of the more obvious uses to which it may be applied. In friendly societies, a correct record of the amount of sickness among the members will afford the means of predicting the number of deaths to be looked forward to, as well as the



class of members among which such deaths are most to be expected. Investigations into the affairs of a society will also be much aided by a skilful survey of the relative amount of sickness to the deaths among the members. Provided that, over a sufficiently long period, an unusually large amount of sickness was found to prevail in relation to the number of deaths, it might be safely inferred that some peculiar element affected the results; but if both sickness and mortality should shew a marked augmentation beyond the calculated numbers, then such a feature might be regarded as evidence of an inferior condition of health among the members of that society. For the more important purposes of medical science, the results in column 6 are easily available. Perhaps no simpler numerical test could be offered of the efficiency of particular modes of treatment; but to apply the results here given with much success, the figures should have been classified according to the sickness and mortality of particular diseases. A portion of the elementary data will admit of such a classification; and it is intended to publish the results on some future occasion.

The following contains some important results deduced from Abstracts D and E pp. 161-2, "Contributions to " Vital Statistics."

Age.	Average duration of each attack of Sickness in Weeks.			
	Ending in Final Recovery.	Not ending in Death but among those afterwards Dying.	Immediately preceding Death.	Among those Dying, including the Attacks immediately preceding Death and others.
	Abstract D.	Abstract E, col. 10.	Abstract E, col. 9.	Abstract E, col. 8.
11 to 35	4.372	7.872	14.907	11.031
36 .. 50	5.131	7.228	12.006	9.276
51 .. 60	11.717	8.711	34.851	18.789
60 and upwards, }	44.794	7.236	122.708	60.990
Total, .	8.636	7.788	45.173	23.932

It will be seen that the fifth column represents the average duration of each attack of sickness, including that ending in death, as well as preceding attacks of sickness. In the second column from Abstract D, under age 35, each attack was of 4·372 weeks duration, but in the fifth column the average is 11·031 weeks, and in the more advanced periods of life a similar increase in the duration of sickness is observable; so that it would seem to follow that the duration of sickness is greater among those dying at periods not very remote from the attacks than among those surviving; and, consequently, if the duration of sickness be closely observed, it offers an element of considerable importance in measuring the expectation of future lifetime of individuals. In the second column the average duration of each attack of sickness for all ages is 8·636 weeks but in the fifth column the average duration is 23·932 weeks. The former class of facts relate to persons who all survived the period of twelve years over which the observations extended, but the latter class belongs to persons all of whom died within the same period of twelve years. The force of this conclusion will be more strongly felt, if attention be directed to the figures in the fourth column, which represent the average duration of the attack of sickness ending in death, at which it will be seen that at every term of life the fatal attack of sickness is of much greater duration than those represented in the fifth column. It is hence obvious, that having regard to the ages of persons, the duration of any attack of sickness is a most important consideration in calculating the chances of recovery.

In many societies, such as the Essex, the Wilts, and others, the rate of sickness which prevails among the female members greatly exceeds that among the other sex. On the other hand there are societies, such as the Female Society at Mold, established by Archdeacon Clough, in which the sickness is remarkably below the average rate for males

generally in benefit societies. However, in the materials furnished in connection with the inquiry which gave rise to this paper, the results for female life shewed in the aggregate, a somewhat higher rate of sickness than the ratio for male lives, although falling much below the rate shewn in the Essex and the Wilts Societies. The following Table shews the results for female lives for the whole of England and Wales as compared with the corresponding results for the male sex.

TABLE XV.

*Sickness in England and Wales according to the data described in pp. 17-9 "Contributions to Vital Statistics"—expressed in Weeks.*

Age.	FEMALES.			MALES.	Difference per Cent.
	Number of Years exposed to risk.	Total Amount of Sickness in Weeks.	Average Sickness.	Average Sickness.	
21 to 25	3140	2590·424	·8250	·8564	— 3·662
26 .. 30	8852	9467·855	1·0693	·9014	+ 18·626
31 .. 35	11538	14323·713	1·2415	·9248	+ 34·245
36 .. 40	10828	14907·566	1·3786	1·0718	+ 28·625
41 .. 45	10058	15131·282	1·5044	1·3443	+ 11·909
46 .. 50	8639	15501·424	1·7944	1·7185	+ 4·417
51 .. 55	7423	21419·137	2·8720	2·3231	+ 23·628
56 .. 60	7080	19033·710	2·6884	3·2773	— 17·969
61 .. 65	4929	16413·859	3·3301	5·4983	— 39·435
66 .. 70	3076	13061·852	4·2464	11·1279	— 61·839

In the Wilts Society the sickness amongst female lives exceeds that of the other sex about 50 per cent., and the following gives the ratio for the Essex Provident Society :—

TABLE XVI.

*Sickness in the Essex Provident Society.*

Age.	FEMALES.			MALES.	Difference per Cent.
	Number of years which Members have been exposed to risk of Sickness.	Total Amount of Sickness experienced expressed in Weeks.	Average number of weeks' Sickness to each Member. Yearly.	Average number of weeks' Sickness to each Member Yearly.	
21 to 25	364.5	536.386	1.471	1.291	+13.943
26 .. 30	437.5	1084.858	2.480	1.346	+84.250
31 .. 35	369.0	967.571	2.622	1.439	+82.210
36 .. 40	327.5	789.999	2.412	1.534	+57.236
41 .. 45	242.0	416.858	1.723	1.712	+ 0.643
46 .. 50	152.5	188.428	1.236	1.821	—32.135
51 .. 55	73.0	307.715	4.215	3.229	+30.536
56 .. 60	36.5	58.430	1.601	4.869	—67.112

The following Abstract of the two preceding Tables sufficiently shews that in female life, as well as in male life, the rate of sickness differs very widely: and the remarks made in respect to male life are, to a great extent, applicable to female life also, but from the recorded experience of the latter sex being more limited, the practical application of the results is rendered more difficult.

*Rate of Sickness in the Essex Provident Society, and in the Friendly Societies of England and Wales generally.*

## FEMALES.

Age.	Essex Society.	England and Wales.	Difference per Cent.
21 to 25	1.471	0.825	+ 78.303
26 .. 30	2.480	1.069	+ 132.000
31 .. 35	2.622	1.242	+ 111.111
36 .. 40	2.412	1.379	+ 74.909
41 .. 45	1.723	1.504	+ 14.561
46 .. 50	1.236	1.794	— 31.104
51 .. 55	4.215	2.872	+ 46.762
56 .. 60	1.601	2.688	— 40.439

Having thus brought under consideration these facts in regard to the experience of females, it is unnecessary to follow them up with any remarks on this particular question, further than simply to caution the promoters of benefit clubs against the indiscriminate use of these materials by societies which admit female members.

While these sheets have been passing through the press I have received a copy of some notes on the Mortality and Sickness found to prevail amongst the Ancient Order of Foresters, compiled from Returns for the three years 1850-2, obtained from the various Courts of that Order. They have been analysed by Mr. William Watkins, P.C.R. of Court "Star of Sussex," No. 1914, Brighton. In this publication by the Ancient Order of Foresters there are many points of interest to which reference might be made if there were sufficient space remaining for that purpose, but it will now be impossible to do more than give the following condensed Abstract of the results.

TABLE XVII.

*Sickness according to the records of the Ancient Order of Foresters for the years 1850-2.*

Age.	Number liable to Sickness.	Total Number of Days' Sickness stated to have occurred.	Sickness to each person in		Age.
			Days.	Weeks.	
20	578	2720	4·706	·672	20
21 to 25	2758	15417	5·590	·799	21 to 25
26 .. 30	4281	28367	6·626	·947	26 .. 30
31 .. 35	4073	25639	6·295	·899	31 .. 35
36 .. 40	3862	29705	7·692	1·099	36 .. 40
41 .. 45	2900	23593	8·136	1·162	41 .. 45
46 .. 50	2219	21079	9·499	1·357	46 .. 50
51 .. 55	1068	14543	13·617	1·945	51 .. 55
56 .. 60	551	8564	15·543	2·220	56 .. 60
61 .. 65	174	3737	21·477	3·068	61 .. 65
66 .. 70	146	3096	21·203	3·029	66 .. 70
Total .	22610	176460	7·805	1·115	Total.



From this Table it will be seen that until age 40 the sickness of the Foresters is quite as high as the rates in Table I. from age 40 to 50 somewhat less, but after the age of 50 the data are so limited as to be wholly inapplicable. These data are of very meagre extent compared with those of the Odd Fellows, but it is most satisfactory to find that the Order is now so alive to its interests as to enforce such an investigation into its affairs as must necessarily have taken place in carrying out this inquiry. Whenever sufficient attention is drawn to the nature and extent of the liabilities of the Order by the publication of its own experience, members will ponder over them and eventually approve of such measures as are calculated to place the Order on a good and sound financial basis.

For many purposes it is important to know the ratio of persons constantly sick, in a Society or particular district. In the following Table the figures in the second column represent the ratio of persons constantly sick for the whole of England and Wales.

TABLE XVIII.

*Ratio constantly Sick at various terms of Life.*

Age.	Number per Cent. constantly Sick.	Number of Males continually Sick in England and Wales.		Age.
		1841.	1851.	
11 to 15	1·4481	12739·40	14003·23	11 to 15
16 .. 20	1·5938	12447·05	14133·99	16 .. 20
21 .. 25	1·6469	22531·85	23932·38	21 .. 30
26 .. 30	1·7335			
31 .. 35	1·7785	19178·80	22406·08	31 .. 40
36 .. 40	2·0611			
41 .. 45	2·5852	22042·94	25698·57	41 .. 50
46 .. 50	3·3048			
51 .. 55	4·4675	26735·18	32527·61	51 .. 60
56 .. 60	6·3025			
61 .. 65	10·5736	52688·58	59265·95	61 .. 70
66 .. 70	21·4000			
71 .. 75	35·3960	67414·13	74489·71	71 .. 80
76 .. 80	50·1088			
81 .. 85	54·3507	24084·54	23624·75	81 .. 90
86 .. 90	62·4885			
91 .. 95	44·1758	1319·09	1338·58	91 .. 95
96 .. 100				

From the third column of the preceding Table, it will be seen that of the male population above 10 years of age, 261182 or 4·5257 per cent. were constantly sick in 1841, and from the fourth column it will be found, that taking the population as given in the census of 1851, there must have been in that year 291421 constantly sick above 10 years of age, or on the average 4·4325 per cent. constantly sick. There are many important applications which may be made of this Table, but its construction is so simple that the ratios according to any other classes of data may be easily deduced.

At this place it may be again stated, that in applying the preceding results to individual classes, or in a few instances only, it should not be expected that they will in every case be confirmed. Nothing short of a refined classification is calculated to meet the peculiar aspect of all the cases presenting themselves. A review of Table I. will shew the wide distinction which prevails between the ratio of sickness in the Rural, Town, and City Districts; and in particular trades or occupations the amount of sickness is sometimes double that in other employments. In sickness, therefore, as well as in mortality, it is obvious that general results can be but of little practical value. Suppose it were attempted to conduct societies in Liverpool, or in any other large city in England, on the terms that would be adequate for Societies in the Rural Districts of Kent and Wiltshire—it is manifest that they could not be of long duration.

Here it may be also well to state, that if in any public inquiry it should be attempted to ascribe the increased amount of sickness in the Town Districts to the less healthy nature of the districts, or their peculiar local influence on health, the conclusion would certainly be fallacious. Arguments precisely similar to those made use of in reference to the mortality of those districts, will explain the differences in the ratio of sickness in the

same places ; and it is therefore to be inferred, that whatever sanitary regulations may be carried out for promoting the health of towns, still the wide distinction between the rates of sickness and mortality in particular districts will not disappear. The cause of that difference is beyond the reach of any sanitary measure ; and unless a change were to take place in the character and machinery of the manufactures of a town, by which the workmen would be habituated to less restrained, but more natural and complete physical exercises, little improvement in the state of health is to be looked for.

The evils, which relate to health, and are represented, by some writers, to exist to so frightful an extent, and to connect themselves with defective sewerage, filthy streets, and ill-planned houses, are certainly overstated by them. The data brought forward have generally been of the most indefinite and insufficient nature ; and when, in connection with this, the erroneous methods employed, and the promiscuous manner in which their figures are generally combined, are kept in view, it must seem surprising that the thinking and intelligent portion of the community should have given their opinions any credence, or believed their conclusions entitled to so much weight.

Perhaps no statistical facts are better established than the duration of life among the middle and upper classes of this country ; and if the data brought forward in this paper be received as of sufficient merit to represent the duration of life among the working classes, it will then appear clear that any important change to be hoped for in the value of life in the Town Districts, must be effected through other means than sanitary regulations.

Those persons who purchase Government Annuities, and have dealings with Assurance Companies, are certainly beyond the reach of any improvements to be introduced by local regulations ; and if cleanliness of habit, comfort of

dwellings, and fresh air, be of themselves powerful elements in raising the standard of life, their influence should be felt among that class of persons. But what are the actual results? The poor workmen inhabiting the miserable streets of our large towns, and inhaling their supposed noxious vapours, are actually longer lived than the affluent and upper classes, whose easy circumstances enable them to inhabit comparatively the palaces of the kingdom.

---

## RATES AND CONTRIBUTIONS OF FRIENDLY SOCIETIES.

---

THE influence of the preceding results on the Rates and Contributions of Friendly Societies is perhaps that which generally most concerns the members of those institutions, and it is proposed to add a few remarks bearing on that subject.

The first point to which attention will be directed is the Value of Annuities, according to the Rates of Mortality, developed in this inquiry, for Friendly Societies in England and Wales.

The rate of interest assumed in the following calculations is three per cent. per annum. In almost every other calculation extant for the purposes of Friendly Societies, a higher rate of interest has been adopted; but a careful investigation of returns on this point, as given in the Schedules referred to at page 18 of "Contributions to Vital Statistics," has shewn that in practice a higher rate of interest is not realised by societies.

The Commissioners for the Reduction of the National Debt have allowed Friendly Societies, established prior to the passing of the 13th and 14th Victoria, £3 16s. 0½d. per cent.; but even in the cases where this mode of investment has been taken advantage of, the difficulty of collecting all the funds at the moment they fall due, and of immediately employing them in the Government Stock, together with the balance, large as compared with the whole amount of the Societies' funds, usually kept in



hand to meet approaching liabilities, renders it difficult to make much beyond three per cent. but at present the 13th and 14th Victoria, c. 115, limits the rate of interest to 3 per cent. to such societies as invest their money with the Commissioners for the reduction of the National Debt.

The distinguishing features of the rates of mortality in the respective districts, will of course develope themselves also in the same order or relation in the value of Annuities, although not in so marked a degree, nor to the same extent as in the simple Mortality Tables. If money made no interest, it is plain that the value of Annuities, and the numerical expression in the Expectation Tables or Mortality Tables of Collective Intensity, would be identical, and under that aspect Annuities would have a maximum value. Again, if money could realise an infinite amount of interest, Annuities would then be at a minimum value, and have the same expression for every Table of Mortality and every age in those Tables. To illustrate this, suppose money could realise 100 per cent, or always double or replace itself in the course of a year; and starting with unity, before the expiration of the first term of the annuity a new fund would have formed itself capable of meeting the annuity, and leaving exactly the original unit with which the start was made, ready to enter on the second term of the annuity in the same manner, and so on *ad infinitum*. Under such an aspect, no matter what Table of Mortality was employed, the values of annuities would differ but little, as unity would invariably be capable, from the interest realised only, of meeting every payment for an absolute term of years. It is therefore evident that the values of annuities involving the discount of money will always shew less distinction between the results derived from different Tables of Mortality than the Tables of Mortality themselves will shew; and that the higher the rate of interest, the less distinction is observable between

the annuities of different Tables, as well as less difference between the values of annuities at various ages for the same Mortality Table.

On reference to the following Abstract, it will be seen that the difference of Expectation between the Rural and City Districts at age 40 is 15·772 per cent; but a comparison of the values of Annuities at that age for the same Districts, will shew a difference of only 11·534 per cent. The following Abstract will give a concise view of the relative values of the two expressions :—

Age.	Expectation of Life in		Excess per cent. in favour of Rural Districts.	Value of Annuities Three per Cent.		Excess per cent. in favour of Rural Districts.
	Rural Districts.	City Districts.		Rural Districts.	City Districts.	
20	45·3550	40·0148	11·774	22·78605	21·29054	6·563
40	30·9724	26·0873	15·772	18·60452	16·45861	11·534
60	16·6524	13·7685	17·318	11·85797	10·18722	14·090

Again, for reasons precisely similar, less distinction will be found to exist between the values of Annuities for various ages in the same Table, than between the Expectations of Life for those ages; for example, the difference of Expectation between ages 20 and 60 in the Rural Districts is 28·7026 years, or 63 per cent; but the difference between the values of Annuities for those ages in the Rural Districts is 10·9281, or about 47 per cent. Like results will also be found for other ages, no matter what Table of Mortality may be employed: taking the general results for the Three Districts for ages 50 and 70, the difference of Expectation will be found to be 11·9863 years, or about 54 per cent; but the difference in the values of the Annuities for those ages is 7·1460, or 46 per cent. The difference in this instance is however less than in the former, on account of more proximate and more advanced

ages being taken ; but with ages less proximate and less advanced, the difference will exceed that in either of the preceding cases. Let ages 10 and 50 in the Rural Districts be compared, and the difference of Expectation will be found to be 56 per cent, but the difference in the value of Annuities is only 37 per cent.

From these remarks respecting the relative values of Annuities, and the Expectation of Life in various Mortality Tables, it is not to be considered that practically it is a matter of indifference which Table may be used as a basis for calculations for the guidance of a Society. The objects of these remarks is intended to lead to quite the opposite conclusion, and to prevent those who are not thoroughly conversant with such subjects from hastily adopting any given Table, simply because the money test, by which it is generally brought into comparison with other Tables, shews but little difference. The success of every Friendly Society, and other Institution dealing in Life Contingencies, depends in a great measure on the proper investment of its funds ; and although Annuities by two different Mortality Tables may apparently approximate to nearly equivalent values, still, before all the conditions of each Table are practically determined, the accumulation of interest as presumed on in the construction of the Tables, will ultimately realise the maximum difference which is found to prevail between the Expectation of Life for the respective Tables.

In annuity Tables two elements only affect the results—the rate of mortality and the rate of interest ; but three elements affect the sickness Tables—the rate of mortality, the rate of interest, and the rate of sickness. It has been shewn that the rate of mortality does not necessarily increase with an increase in the rate of sickness ; and therefore two classes of the population may be influenced by the same or nearly the same degree of sickness, and yet

be subject to very different rates of mortality. Keeping this in view—suppose there are two sickness Tables, A and B, having the same or nearly the same rate of sickness at each age; but that the population of Table A is subject to a high rate of mortality compared to that of Table B,—it is evident, that although each individual of the same age in both Tables would in the course of the same year of life experience the same degree of sickness, yet each person under Table B would be subject to a greater amount of sickness over the whole duration of his life, and for the simple reason, that his expectation of life is greater. Take any number of persons—say 100, on the former Table at 30 years of age, and suppose their expectation, or for greater exactitude, their equation of life, to be 30 years; one-half only of those lives would live to attain 60 years of age; but if on the other Table the equation of life were 40 years, one-half of the same number would not be dead till 70 years of age, a considerable portion of which would be subject to an increased ratio of sickness in the decennial period of life following age 60. It happens that there is an actual case in point to illustrate this hypothesis. The Rural Districts of England and Wales, and the average results for all Scotland, shew almost exactly the same amount of sickness in the aggregate over the whole period of forty years from age 30 to 70, differing by less than two-tenths of a week's sickness; the amount in the

Rural Districts of England and

Wales being . . . . 121·1448 weeks

And in the whole of Scotland . 121·3164 ...

But the equation of life for the former at age 30 will be found to be 40·813 years, while for the latter it is only 37·478 years, being a difference of 3·335 years. And



therefore, although there is no greater amount of sickness in the Rural Districts of England and Wales than in Scotland generally, still the value of a sick allowance in the former is greater than in the latter.

There is another feature connected with Tables of the rates of sickness, which will affect their money-values, independently of the influence of the rates of mortality, and that is the graduation or distribution of sickness over the various periods of life. It might happen that two sickness Tables gave the same amount of sickness within a given period of years, but that in the one Table it was more uniformly spread over the various terms of life; not shewing, as in the other Table, a very low rate of sickness at the younger ages, and a very high rate at advanced ages. This circumstance, although the rate of mortality in both Tables were the same, would occasion a difference in the value of sick allowances—and for two reasons; first, because the bulk of the sickness in the one Table was deferred till the advanced ages, those persons dying before reaching those ages would experience a minimum amount; and second, because the money liabilities also being deferred, the early premiums would by longer investment accumulate to a greater sum. An inspection of the results in the Abstract, given in page 10 and those of Table II. will shew that such a relation exists between Mr. Ansell's Table and the general results of this inquiry; the sickness in his Table being more uniform, and shewing less disparity for the various ages, while the Highland Society Table runs almost parallel over the whole term of life, from 20 to 70 years of age, with the results for the three Districts.

The following Abstract will shew the comparative values of an allowance of £1 per week in sickness up till age 70:—



Age.	ENGLAND AND WALES.				Age.
	Rural Districts.	Town Districts.	City Districts.	Three Districts combined.	
20	34·68519	39·80233	35·41518	36·20420	20
30	39·71760	46·39042	40·81807	41·67304	30
40	46·56296	55·56052	46·00568	48·83092	40
50	53·45831	62·31153	50·16449	55·28222	50
60	55·15634	61·85428	42·69764	55·23260	60

The important effect of the above differences on the stability and permanence of a society is obvious. The distinction which has been observed in respect of single payments or premiums, will also be found to prevail in the annual premiums, and the following Abstract will give a general idea of the Contributions for different ages. The annual premium, as well the sick allowance, will in this case also terminate on attaining 70 years of age.

Age.	ENGLAND AND WALES.				Age.
	Rural Districts.	Town Districts.	City Districts.	Three Districts combined.	
20	1·51649	1·76190	1·62891	1·60100	20
30	1·91441	2·31954	2·12238	2·04753	30
40	2·63176	3·31129	2·82968	2·83154	40
50	3·93305	4·87185	3·94155	4·16193	50
60	6·56278	7·76910	5·36326	6·70497	60

The preceding observations will be sufficient to point out the leading features of the sickness Tables, and to suggest the proper modes of application to the practical uses of Friendly Societies.

TABLE XIX.

*Single and Annual Premiums for Sick Allowance of  
£1 per Week.*

Age.	Benefits and Annual Payments to cease at 70.		Benefits to continue through Life. England.		
			Payment to cease at 70.	Payment to continue through Life.	
	Scotland.	England	Annual Premium.	Annual Premium.	Single Premium.
20	1.4716	1.6010	2.43056	2.34889	54.96356
21	1.5011	1.6368	2.50474	2.41681	56.13955
22	1.5319	1.6743	2.58281	2.48806	57.35479
23	1.5643	1.7138	2.66504	2.56285	58.61161
24	1.5985	1.7591	2.75802	2.64718	59.91067
25	1.6348	1.7985	2.84309	2.72383	61.25446
26	1.6734	1.8441	2.93954	2.81049	62.64415
27	1.7147	1.8964	3.04843	2.90800	64.08249
28	1.7589	1.9425	3.14919	2.99758	65.57331
29	1.8062	1.9959	3.26339	3.09875	67.11975
30	1.8552	2.0475	3.37675	3.19853	68.72624
31	1.9158	2.1121	3.51343	3.31850	70.39642
32	1.9746	2.1757	3.65061	3.43806	72.13488
33	2.0375	2.2431	3.79663	3.56451	73.94001
34	2.1047	2.3144	3.95202	3.69817	75.80993
35	2.1762	2.3897	4.11740	3.83937	77.74365
36	2.2523	2.4692	4.29348	3.98848	79.73958
37	2.3331	2.5529	4.47069	4.14592	81.79603
38	2.4188	2.6412	4.68104	4.31212	83.91558
39	2.5099	2.7339	4.89432	4.48791	86.09388
40	2.6067	2.8315	5.12214	4.67342	88.33321
41	2.7099	2.9342	5.36580	4.86948	90.63574
42	2.8191	3.0423	5.62690	5.07688	93.00194
43	2.9361	3.1561	5.90718	5.29642	95.43467
44	3.0602	3.2762	6.20876	5.52911	97.93764
45	3.1917	3.4030	6.53410	5.77602	100.51489
46	3.3308	3.5373	6.88605	6.03842	103.17002
47	3.4777	3.6797	7.26799	6.31773	105.90721
48	3.6323	3.8336	7.68896	6.61524	108.73331
49	3.7944	3.9914	8.13695	6.93230	111.65371
50	3.9629	4.1619	8.63337	7.27064	114.67544

Another feature which particularly marks the older class of Friendly Societies, and which deserves attention, is a want of graduation in the premiums or rates of contribution. This feature, although generally associated with inadequate rates, is not of itself evidence of instability, but is rather a principle which is non-equitable to the

members. The better constituted Friendly Societies have long discontinued such a plan, and have now Tables graduated according to age ; but as there are still many Societies not so improved, it is proposed to add a few observations on the nature of this error, which has been most strikingly developed in the management of Odd Fellow Societies.

For example, one member with another, in passing from 20 to 30 years of age, will experience about  $8\frac{1}{2}$  weeks' sickness during the ten years, but in passing from 60 to 70 years of age, he will be subject to above 77 weeks' sickness, and in the ten years immediately following age 70, he would experience 205 weeks' sickness. This gradual increase of sickness with an increase of age, cannot fail to demonstrate that it would be anything but equitable to admit members at every period of life on the same terms. Viewed as a money question, it will be seen, (Table A Q\*) that at age 20, the sum of £36 4s. 1d., paid down, would provide £1 a-week during sickness up till age 70, but that, at age 40, £48 16s.  $7\frac{1}{2}$ d. would be necessary ; and, therefore, if it were the practice of lodges to admit members at those ages, on equal terms, the older members must be supported, to a great extent, at the expense of the younger. A similar relation will be found to prevail with regard to the provisions for allowances at death.

If the money values for the preceding benefits were determined according to the experience of the members of the Manchester Unity itself, they will be found not to differ very widely. It has already been stated with regret, that Mr. Ratcliffe, in calculating his monetary tables, employed the Odd Fellow data beyond the age of 65, though they were evidently defective subsequent to that age, from the very small number of persons over whom the observations were made : and as the data for the twenty years of life

\* Contribution to Vital Statistics.

preceding that period, approximate in a very remarkable manner to the results in this paper, there is every reason to believe, that if after the age of 65, the data of the Odd Fellows' experience had been sufficiently ample, an equally close approximation would have shewn itself. At all events, the data in this Paper, in the advanced stage of life, being of forty times the magnitude, should, seeing that the other is obviously defective, be used in preference.

To avoid further argument on the subject, it will be assumed in the future pages, that rates graduated to lower terms than set forth in the preceding Tables would be unsafe for the guidance of the Order. Complete evidence of this is furnished in the analysis of the facts and elementary data on which the calculations are founded; and the inherent evidence in the various parts of this paper amply demonstrate that the liabilities of the Order have been hitherto quite equal to those anticipated in these calculations. It therefore remains to determine whether the contributions exacted by the Order are such as are calculated to maintain the stability of the Institution, and realise the benefits promised to the members. It may be also as well to mention, that in the discussion of this point no statement will be advanced for which facts and examples both in and out of the Order do not exist. This is believed to be the only satisfactory mode of treating such a question. Unless ample data be available, it is impossible to measure the liabilities; but with sufficient data, it becomes a matter of certainty and of simple calculation, and the province of mere opinion is ceded to positive evidence, to which all must submit who can comprehend the argument.

It is not thought necessary to refer at this place to the rates and contributions hitherto demanded by the various lodges in the Unity, but to take up the question as to whether the scales drawn up by the Board of Directors at Manchester, and proposed some time since by the Glasgow



A. M. C., are safe, and calculated to meet all the liabilities of one class of the Members of the Order, namely, those admitted prior to August, 1853. Any arguments used in reference to those scales, whether in favour of their adoption or otherwise, will apply with greater or less force to the present rates of any particular lodge, according as they are greater or less than those of the proposed scale. This course is inevitable, as it is impossible to discuss the rules of each lodge *seriatim*.

In the Manchester Unity, during the year 1844, the total number of weeks' sickness experienced by the members was 226917, and the amount of money paid to sick members was £107,440 8s. 11d.: it hence follows that for each week's sickness there was paid about 9s. 6d. As a standard of comparison it may therefore be assumed that the general practice of the Unity is to pay 10s. per week in sickness, and we shall test the accuracy of the proposed scales on this ratio. Some lodges no doubt pay more, and others less, to their members, than the above average: but if the terms are calculated for 10s. per week, it will then be easy to determine the rate for any other particular scale of payment.

In the first instance reference will be made to scale No. 1, or manufacturing class, as prepared by the Board of Directors, and recommended to be adopted by the Glasgow A. M. C. The average age of the members of the Unity was stated to be then 32 years; and making that the point of comparison, it will be found that a weekly payment of 5d. by the members is to provide for them the following benefits, viz.:

£0	10	0	per week during sickness,
10	0	0	at the death of a member, and
5	0	0	at the death of a member's wife.

But it will also be found that in addition to the 5d. per week, each member has paid entrance money, which for



age 32 is equivalent to an annual payment of 1*s.* 1*d.* A payment of 5*d.* weekly is equal to a yearly sum of £1 1*s.* 8*d.*; and to this add 1*s.* 1*d.*, and the full yearly payment will be £1 2*s.* 9*d.*

Let us next determine how far this payment is calculated to meet the liabilities of this class of Members of the Order, according to the data already alluded to.

On reference to Table XIX. it will be	£.	s.	d.
found that the annual payment at age			
32 for an allowance of 10 <i>s.</i> per week			
during sickness, to continue to the			
extreme of life, is	1	14	4½
For £10 at death of a member, age 32, .	0	3	8½
To provide £5 at the death of a member's			
wife, (the deaths being in the ratio of			
1650 to 2286 of the member's them-			
selves,) the payment will be	0	1	4
Total payment required for the three	<hr/>		
benefits promised by the Order .	£1	19	5
	<hr/> <hr/>		

The payment necessary to provide for the benefits promised will thus be seen to amount to £1 19*s.* 5*d.* to each member yearly, but the actual sum demanded according to the new scale, No. 1, is only £1 2*s.* 9*d.*, being about 42 per cent. less than the terms necessary to enable the Unity to meet its engagement. It should be kept in view that in the preceding calculation nothing is allowed for expenses of management, so that the sum of £1 19*s.* 5*d.* is absolutely necessary to meet the various liabilities without any deductions whatever.

Again : according to results deduced from the actual experience of the Order, given hereafter, the following are the rates necessary to provide the same benefits, viz. :—

Yearly payment required at age 32, on account of an allowance of 10s. per week during sickness, to continue to the extreme of life, is, according to	£.	s.	d.
Table XXIV., following . . . . . =	1	10	1
For £10 at death of a member at age 32, Table XXIII. . . . . =	0	4	1
To provide £5 at the death of a member's wife (the deaths being in the ratio of 1650 to 2286 of members themselves) . . . . . =	0	1	6
Total payment required for the three benefits promised by the Order, and according to the data derived from	<hr/>		
the experience of the Unity itself . =	£1	15	8

The result is of vital importance, and should receive the immediate and earnest attention of the members. It is believed that the form in which the present evidence is given, will enable any one of ordinary intelligence to test all the figures, and thoroughly satisfy his own mind of the perilous condition in which the Order is placed.

For the year 1844 the annual income of the Order, under the head of contributions, was £.245,842 13s. 8d., and, according to the preceding figures, there would still be an annual deficiency of no less than £.209,688 11s. 10d. The awful calamity which must await the Order under such circumstances cannot fail to alarm the members as to the terrible consequences which must inevitably follow their neglect or indifference in carrying out the radical reforms necessary in their constitution. Truly, in such an event, the sins of the fathers will be visited on the third and fourth generations. The members have now the opportunity of perpetuating one of the most useful institutions ever developed by the working classes of any country.

Under proper regulations, it may be the direct means of elevating the moral and physical condition of a vast body of the rising generation, and imparting a social character and importance to the industrious and provident classes which they have never yet acquired; but, to participate in those advantages, it is absolutely necessary that a great movement should be made towards financial reform in the institution. Let, therefore, every member say to himself, “I will put my shoulder to the wheel,”—I will make an effort, which I am certain is quite within my power,—I will do that, as an individual, which others have done in smaller institutions, and which is only just and equitable,—I will listen to the warning which science and experience set before me, and I shall then have the satisfaction of believing that I have done the best that could be done; I shall feel convinced, that with good and economical management, our institution will survive and prosper,—it will really and truly be the support of my declining years; when the infirmities of old age creep upon me, I shall have the consolation of falling back on the industrious savings of vigorous youth. My family will be induced to follow my example. With my friends and neighbours all petty jealousies will be set aside,—we shall unite in promoting our own and our children’s welfare; and while we profess to unite in the bonds of true fellowship, let us honestly exclaim—

“ Two are better than one ;  
 If they fall, the one will lift up his fellow ;  
 But woe to him that is alone when he falleth,  
 For he hath not another to help him up.”

The regulations of the Unity imply that allowances will be given in sickness, or during incapacity for labour, till the extreme of life, but the preceding monetary Tables for the various districts provide for sickness to 70 years of age only. It will, however, be found that a deferred annuity,

after that term of life, of half the amount, combined with the other, will be nearly equivalent to an allowance in sickness during the whole term of life. And the following illustration will shew their relative values. In Table XIX. it will be found that, at the age of 30, the annual premium, payable until age 70, for an allowance of £.1 per week in sickness, during the whole period of life, is about £.3 7s. 6d. Now, the annual premium for the same allowance up to age 70 is about £.2 1s., and the annual premium for a deferred annuity of 10s. per week after the age of 70 is £.1 9s. 4d.; total annual premium for both, £.3 10s. 4d. The difference between this sum and the preceding is, therefore, not so much as materially to affect the comparison.

Let us see, then, what annual payment would be required, in each district, for the following benefits, viz:—10s. per week in sickness till the age of 70; £10 at the death of a member; a deferred annuity of 5s. per week at the age of 70; and £5 at the death of a member's wife,—which are equivalent to the benefits proposed in scale No. 1, or manufacturing class. The following shews the yearly payment which should be charged at the age of 30, for each of those benefits in the three districts, as well as in the three districts combined, which last group may be considered to represent the whole Unity:—

Description of Benefit.	Rural Districts.	Town Districts.	City Districts.	The Three Districts combined.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
10s. per Week } during Sickness }	0 19 2	1 3 2	1 1 3	1 0 6
Deferred Annuity } of 5s. per Week }	0 16 7	0 11 0	0 10 10	0 14 8
£10 at the Death } of a Member . }	0 3 5	0 3 11	0 4 4	0 3 8
£5 at Death of a } Member's Wife }	0 1 3	0 1 7	0 1 6	0 1 4
The above four } combined . }	2 0 5	1 19 8	1 17 11	2 0 2

The figures in the above Abstract may be regarded as an approximation to the relative liabilities of the lodges in the various districts as near as our present knowledge will admit of arriving; and it is somewhat curious to observe, that those places or districts usually thought most hazardous are actually least so. There is no doubt that the members of the Glasgow A. M. C., in resolving to adopt two scales of contributions, were impressed with the belief that the lodges in the Town and City Districts were subject to greater liabilities than those in the Rural or Agricultural Districts, but the facts of the case will be seen to be otherwise. The error has, in all probability, arisen from supposing that the risks of the various districts would bear the same relation to each other as the rates of mortality among the members of those districts. In fact, the propriety of having two scales has been generally argued on that shewing; and under a cursory survey of the question, the one opinion was, perhaps a natural enough sequence of the other; but a more comprehensive view of the subject will shew that the legitimate effect of increased mortality is to diminish the liabilities of the lodges, instead of increasing them as has been supposed.

It will be seen by an inspection of the figures in the preceding Abstract that the risk incurred from sickness, greatly exceeds that from the mortality of the members. Expressed in money, the relative values of those two items for each member entering a lodge at the age of 30, are—

For 10s. per week in sickness (single									
payment)	.	.	.	.	.	.	.	£34	7 4
For £10 at death (single payment)								3	14 0

the one being more than nine times that of the other. It has been equally well established, that increased mortality is not always accompanied with an increased rate of sickness; and the direct consequence of these two facts is



to render the liabilities of lodges in what are usually called the healthy districts, actually greater in some cases than in the less favoured districts. For an illustration compare the Rural Districts in the preceding Abstract with the City District. The apparent anomaly may be explained in this way:—If 100 members, at the age of 30, were to enter a lodge in a Rural District, and at the same time 100 members of the like age were to enter another lodge in a City District, the result would be, that 40 years hence, when the surviving members had attained 70 years of age, in the Rural Districts 52 of the original 100 members would still be alive, while in the City District 38 only would reach that period of life. Well then, to carry out this illustration, suppose the plan of those lodges to have been to demand a single payment from the members on entering, to provide 10s. per week in sickness up till the age of 70, the 100 members on entering the lodge in the Rural District would have had to pay down £1986, but the members in the City District would have been required to pay £2041—exceeding the other district by only £55, and at the end of 40 years the funds of both lodges would be exhausted. Next, let us suppose that the foundation of those lodges was on the general plan of the lodges in the Order, in which a sick allowance is guaranteed till the extreme of life ; then their relative liabilities will appear in a new light. The lodge in the Rural District has become saddled with 52 members, while in the City District there are only 38 members ; and without further evidence it will be obvious that the lodge in the Rural District is placed under the greater liabilities. During the succeeding ten years, each member in the Rural District would experience about 21 weeks' sickness yearly, and as there are 52 members the aggregate sickness would be 1092 weeks yearly. On the other hand, each member in the City District would experience 24 weeks' sickness yearly ; but as the number

of members is only 38, the aggregate sickness would amount to 912 weeks per annum, falling short of the amount of sickness experienced by the lodge in the Rural District by no less than 180 weeks yearly. It will thus be seen, that the very fact of the increased longevity of the members of the Rural Districts chiefly accounts for the increased liabilities of the lodges in those districts. The advanced period of life is that in which the great amount of sickness is experienced, and in the City Districts the members are cut off before attaining it; but the prolongation of life in the Rural Districts places on the sick list of a lodge a great mass of members at an advanced age, when they become almost permanent burdens on the funds.

The relative liabilities, so far as sickness is concerned, in the two districts, may be represented by the following money expressions, which are the equivalents in a single payment, for members entering at the same age, to provide equal allowances in sickness during the whole period of life:—

Rural Districts . . . . .	£36	19	5
City Districts . . . . .	30	15	8

So far, then, it is obvious that the scales No. 1 and No. 2, published by the Board of Directors, are not at all applicable to the classes for which they were intended; for if the facts of the case were admitted to have any weight, they would go to reverse the application of those scales, and that which was meant for the Town or Manufacturing Districts and Classes, would be applied with more truth to the Agricultural Districts and Classes.

On referring to the preceding Abstract it will be seen that the annual payments for the four benefits combined amount, in the

Rural Districts, to . . . . .	£2	0	5
Town Districts . . . . .	1	19	8
City Districts . . . . .	1	17	11

So that if those benefits were adopted by the Unity generally, or any other scale of benefits bearing the same relation, the contributions in the Rural Districts, if adjusted on equitable principles, should be the highest, and those in the large City Districts the lowest, the smaller Town Districts being intermediate. It becomes, however, a practical question of important consideration, whether our knowledge of the subject has yet become so refined, and whether the difference in the risks of the various classes has been proved to be so remarkable, as to render two scales of contribution necessary.

If the results for the three districts combined, as given in the preceding Abstract, be viewed in connection with those for each of the districts, it will immediately appear that the difference, although of the opposite character to that anticipated, is, after all, exceedingly small, and, in a practical sense, unimportant; as there is scarcely another feature in the management of the various lodges, which has not more influence on their monetary affairs. For the City Districts, the difference is 2*s.* 3*d.* yearly; for the Town Districts, the difference is 6*d.* yearly; and for the Rural Districts, the difference is 3*d.* yearly.

To recognise, therefore, a difference in various districts, while lodges are, as in the Unity, all under the same general constitution, is clearly a refinement at which the most improved institutions of the day have not yet arrived.

An inspection of the same Abstract will further prove, that if the regulations of the lodges in the Unity were such as to give a member the option of providing any one or more of the four benefits, the case would be immediately altered, and it would become, in that event, necessary to make a distinction in the payments. There is no doubt that even this change, with many others of an important nature, will take place before many years pass away, and render the Order the great asylum of the working and

industrious classes, to which they can, with confidence, resort for relief from the pecuniary distress and indigence which almost invariably attend sickness and disease.

It will not now be necessary to enter into the question of the influence of employment or occupation on the liabilities arising from the various classes of members, as it is evident that the increased mortality and sickness in peculiar trades place them relatively to the Unity in a similar position with that which the members of the City Districts were shewn to hold to those of the Rural Districts; and, therefore, the same arguments used in respect to the influence of locality on the liabilities of lodges, are equally applicable to the question of employment.

These observations naturally lead to the recognition of another marked feature in the principles of these institutions, which might be well and effectively carried out within the Manchester Unity. Owing to the very small number of members in each lodge, it is impossible, even under the best and most skilfully graduated Tables, that the lodges could be safely and firmly established if existing independent of each other. The following analysis has been made of the number of members in the various lodges according to the classification already described.

District.	Lodges.	Average Number of Members.	Number of Members in each Lodge.
Rural . . .	1138	66,208	58
Town . . .	1240	77,070	62
City . . .	1304	99,747	77
Whole Unity .	3682	243,126	66 •

\* On the 1st January, 1865, this state of things had much altered; according to a statement furnished for that date there were 3,344 Lodges, containing 355,015 Members, or an average of about 106 to a Lodge.



It requires but little practical knowledge to understand that many such lodges, as above, would be destroyed from the operation of other causes than inadequate contributions. The average number of members appears to be about 66 to each lodge; and it is apparent that, if three or four unhealthy members were to gain admission to any one of these, it must soon break down, even with highly graduated terms. But where lodges number ten or a hundred times as many members, there is but little danger to be feared from such accidents. One of the most valuable features to be introduced into the Order would, therefore, be the formation either of all the lodges into one grand parent society, or of a certain number into districts, with united interests. The practical details for carrying out such a plan are perfectly simple, and the advantages to arise so obvious that it deserves the best consideration of members.

The reports of the Blackburn and Preston districts of the Manchester Unity sufficiently prove the great hazard and risk attending small lodges or societies, and how uncertain must be their stability, from the marked fluctuations to which small numbers are always subject. In January 1848, the Blackburn district consisted of 28 lodges and 2109 members, or about 75 to each lodge; and in the preceding year they experienced 15,507 days' sickness, being about 7 days 8 hours to each. However, in one lodge, consisting of 57 members, the sickness in that year did not average more than 17 hours to each; but in another, having 47 members, the sickness averaged upwards of 35 days to each member, or about 50 times more than the other lodge; and 6 only of the 28 lodges experienced anything like a near approximation to the average result.

Again, in another report made by the Blackburn district, in which the sickness and mortality for the five years 1841-5 is furnished, it appears that even the average for the whole five years in the various lodges differs widely,



being as high as 10 days 16 hours in one, and only 2 days 6 hours in another; while the average for the whole 5 years, for all the lodges collectively, was 5 days 20 hours. It is hence obvious that, even over a series of years, considerable fluctuations take place in the rate of sickness among individual lodges when composed of a limited number of members.

It has been often said that the deficiencies in the rates of contribution will be amply compensated by the donations to the society, and the number of members who never seek relief from it. The latter part of the argument clearly falls to the ground, as the actual amount of relief given is quite equal to that anticipated by the Tables; and as to the benefits to be derived from donations, which some have represented erroneously at 20 per cent. of the whole income, it will be found that the amount from all sundry items not only does not help the contributions of the Order, but is inadequate to meet the expenses of management, being only 42 per cent. of that amount. It is, therefore, imperative on the Order, so far as donations are concerned, to graduate their rates on a scale equivalent at least to that given in the Tables already referred to.

Another argument frequently brought forward in favour of low rates, is the relief which the funds of lodges will experience by allowing only a reduced rate of aliment in long-continued sickness. This argument can only be viewed as a desperate expedient to prop up a falling institution, and not calculated to afford any adequate support. The first question which would naturally arise in an intelligent mind, is the practicability of applying such a principle to life contingencies, and the possibility of calculating the average duration of each attack of sickness at various ages. Unless the solution of this last question be first accomplished, it is evidently nothing short of quackery to proceed by random in the management of a

society or lodge, under the blind belief that a reduction of aliment in long continued sickness will produce the great benefits to the funds which has been so oft argued. No writer on Vital Statistics has yet solved the problem, and therefore means are not at present available to aid or warrant any one in stating the particular amount of relief which would be afforded by the introduction of such regulations. From the data and facts, however, given in Table XIII., enough is known of the subject to satisfy any diligent inquirer that practically the funds of a lodge would be but little influenced by any such circumstances, except at very advanced periods of life, at which it will be presently shewn that a much better remedy or cure is available on scientific and understood principles, and that there is no need therefore of having recourse to expedients of a doubtful nature. It may, however, be here mentioned that although much information has been herein given on the question of the duration of each attack of sickness, still in anything like a complete form it is now for the first time under investigation with a view to publication, but in the meantime, and at this stage of the question, inspection of the second and fourth columns of Table XIV. will satisfy any one of the little practical advantage to result to a lodge or society by the adoption of such a regulation, while it must occasionally be attended with most serious injury to individual members. As formerly remarked, the great and essential and noblest feature in friendly societies of every description is the certainty that under a skilfully developed system they will afford to members a competent support and complete independence during sickness and disease. Admitting this integral element to have its full weight, and keeping in view the fact that in the Order itself the average full allowance in sickness is a little under 10s. per week, it becomes a serious question whether the great principle of such an institution is not violated by admitting the exis-

tence of a regulation which in the prime of life may reduce the support of an industrious workman, with possibly a large family, to the miserable pittance of 5s. weekly. It is evident that this would constitute pauperism itself. To these observations it may be replied, that the very fact of the principle affording but little relief to the funds goes to shew that but few of the evils here detailed would occur. This, no doubt, is perfectly true; still individual cases must occasionally arise, and no society or lodge can be justified in admitting a principle which can possibly subject any one of its members to so hard a fate.

It is obvious that, if it be necessary to reduce allowances in long-continued sickness, such reduction will most effectively aid the funds in the advanced term of life; and, following out this idea, it will be found that another principle is available, which is free from the objections of the preceding scheme, and at the same time fraught with most important monetary advantages to the members individually and collectively.

In an advanced period of life—say, after age 70—it will always be a more difficult matter to define sickness than during an earlier period; and in the management of all benefit institutions which have existed long enough this has been found a most serious practical difficulty, and so much felt that up to the appearance of the present calculations no sickness Tables went beyond that term of life. Carrying out this view, it will be found that, by relinquishing sick allowances after 70 years of age, or any other term of life that may be fixed on, the practical management of lodges will become much simplified, their constitution strengthened and rendered more secure, and the moral character of the members exposed to less temptation.

The first part of the question to which we shall direct attention is that by which it will be seen that, under the plan of discontinuing the sick allowance at age 70, and

substituting a deferred annuity at that age of one-half the amount of the weekly sickness allowance, the contributions from members would be very nearly the same as those which would be required to provide for a sick allowance to the extreme of life. In this instance we shall take the case of a member entering a lodge at age 32, the average age of the members in the Unity; and we shall further suppose that all his contributions will close after attaining age 70, and determine the yearly payment required under both conditions.

In the first place, to provide for the various benefits, including a sickness allowance to continue during the *whole period* of life :—

	£.	s.	d.
Payment for 10s. weekly sick allowance, Table XIX. . . . .	=	1	16 6
£10 at the death of a member . . . . .	=	0	3 11
£5 at the death of a member's wife . . . . .	=	0	1 5
			<hr/>
Total yearly payment . . . . .	=	£2	1 10
			<hr/> <hr/>

In the next place, to provide for the same benefits, but including a sickness allowance up to age 70 only, and after that period a deferred annuity :—

	£.	s.	d.
Payment for 10s. weekly sick allowance . . . . .	=	1	1 9
£10 at the death of a member . . . . .	=	0	3 11
£5 at the death of a member's wife . . . . .	=	0	1 5
Annuity of 5s. weekly after age 70 . . . . .	=	0	16 0
			<hr/>
Total yearly payment . . . . .	=	£2	3 1
			<hr/> <hr/>

It will thus be found that while by the former method the yearly payment would be £.2 1s. 10*d.*, by the latter plan it would be increased only 1s. 3*d.* yearly, but the latter would possess advantages of a very high order over the other.



First, it would exercise a salutary check on imposition and fraud. There can be no doubt that numbers often enter lodges having concealed ailments, and defects of health and constitution not easily detected; and in every such case, were it a condition or regulation of the lodge that a member providing a sickness allowance must also contribute for a deferred annuity of at least one-half the amount, a protection would be formed against the undue expenditure of the funds; for if his health be so defective as to cause him to make unusual claims on the sickness fund, that very same feature would render his life of shorter duration, and consequently give him an inferior chance of becoming an annuitant; and the loss on the one fund would be, therefore, compensated by the gain on the other.

In the second place—a gigantic institution like the Manchester Unity would reap an advantage by being thus enabled to adopt a uniform scale for all districts; for, as may have been observed in a preceding illustration, if, in the City and Town Districts, an increased amount be paid in the shape of sick allowance, it must follow that fewer claimants will arise for annuities; so that if one well developed scale were provided it would be equally applicable to all districts. In the next place, a universality would be given to the sphere of action of the Unity, by the freedom with which the members of various trades and occupations might be admitted into the lodges. There would not then exist the same necessity for that stringent exclusion of persons of particular callings, usually thought unhealthy, as the liabilities of lodges from sickness, and from annuities, would have a constant corrective influence on each other.

The merits of this plan over that at present in force seem to be quite apparent. It will enable the lodges to determine their liabilities with more precision, and very much simplify and improve the system of management; while the members will be removed from those temptations



to fraud and imposition, in the advanced periods of life, which so easily connect themselves with benefit and provident societies. On attaining 65 or 70 years of age, or any other period at which it may be agreed the annuity should commence, the member will regard it as a permanent and standing allowance; and no scheming, or pretence of sickness, can have any tendency to increase that amount; those temptations being absent, there is every reason to believe that the relative position of all parties to each other would be improved, and a higher tone of moral feeling induced, as well as a more elevated social rank in society.

According to the present scheme of the Unity, members living beyond the age of 70 have still to continue their contributions or payments as before; but the preceding plan would relieve them from that burden. Again, the human constitution, as a general rule, is then still capable of sustaining considerable labour; the annuity is equivalent to the payment of 26 weeks yearly of full pay in sickness; but during the succeeding ten years the sickness will average about 20 weeks yearly, and the remaining portion of the year will therefore be open to any avocations a member may be able or choose to follow, uncontrolled by the society or the surveillance of its officers. It may not be out of place to allude here to the duty which devolves on the officers of the Order, as the organs of a great public body, to endeavour to elevate the character and improve the circumstances of its members generally. Men, if they provide for their immediate wants, are very apt to overlook every provision for the winter of life; and it is no mean expression of the prudential feelings of the working classes of this country to find so many members enlisted in the ranks of one great mutual-supporting institution. It is said that not more than 130,000 members of the upper and middle classes have yet availed themselves of the

benefits of life assurance. What a brilliant contrast do we then find on the part of the poorer classes of the country, in the host of persons enrolled as members of one description or another of friendly societies ! The officers of the Manchester Unity ought to feel themselves under high and weighty responsibilities ; they are called upon to take up a grand scheme of financial reform, and to propound it in clear and calm language to the members of the Order. The whole plan of the benefits and contributions should be remodelled, on the ground of the necessity for such a step in order to secure the stability of the Unity, and the manifest advantages thence to arise to its members and their families. If the habit of discussing and of practically providing for deferred annuities were once established, the most beneficial results would follow, and those engrafted on the succeeding generation might raise the Order into one of the noblest institutions of the times.

Recently it has been attempted to puff up the merits of the Order on its charitable features and constitution. This is a species of advocacy in which the more enlightened and recognised supporters of Odd Fellowship should cautiously avoid participating. It ought never to be lost sight of, that thousands of members hold vested rights and interests in the Unity, and that these should be satisfied before other claims can legitimately arise. “ Be just before you “ are generous ” is perhaps the best reply to such enthusiasts. The merchant or tradesman who squanders his property on charities and other purposes, however laudable in themselves, would meet with but little sympathy should he do so at the expense of his creditors. So also with the Unity : young men in the vigour of health are induced to become members, and in a few years afterwards discover that they have been entrapped into a bankrupt society, which attempts to justify its fallen condition by the liberality of its charities. With what warmth and sincerity

of feeling can those persons regard such a species of management? The great question of questions is the stability of the Order; and if the essential elements of security are wanting, not only will its charities disappear, but the Unity itself, with all its boasted blessings, be forgotten with other bubbles and visionary schemes. Let the terms of membership be such as will effectually carry out all the purposes contemplated; let every member of the Unity feel warranted in stating to his friend and neighbour—"In this Society is exercised the highest order of prudential feelings; every care has been taken to justify me in asserting that whatever is promised to our members can with certainty be fulfilled. Join us at once: our weekly or monthly payments are small, but their accumulations will afford you in after years, and during periods of sickness and distress, a comfortable support, which you can demand as the just and merited reward of your own honest and industrious savings. It is the simplest and cheapest way of guarding against the calamities of sickness and disease, and affords the only available means to a working man of providing for the vicissitudes and infirmities of old age." If every member could at the present time in honesty and good faith so express himself, for the hundreds that now join the Order thousands would become members, and the Unity outgrow in magnitude the most sanguine expectation of its advocates. Charity truly "Covereth a multitude of sins;" but it is much to be feared that, unless immediate measures be taken to retrieve the lavish expenditure of the Order, its too much boasted charities will, by all right-thinking men, be classed among its follies and its extravagancies.

One course, at the present juncture, is clear, and open to every member. It must appear to be his bounden duty to raise his voice against the admission of new members on

any other terms than those which science and experience prove to be safe and equitable. To do otherwise, can be described in its mildest form as nothing short of a fraud on the public. It is a great, and to some extent a difficult question, to remedy the evils incidental to the Order, so far as existing members are concerned ; but as to future members there cannot possibly be any doubt or difficulty. There are authorities in the country calculated to give sound and trustworthy advice on the course to be followed ; and why should not these be consulted at a time when the most serious alarms are sounded in every quarter ? Members should calmly reflect, that the radical and scientific part of the question is neither a very simple nor a very generally understood one, even among the most highly educated classes ; and it can therefore be no reflection on the intelligence of any individual member to seek for advice elsewhere.

It is quite impossible to govern the Order on sound principles under the present mode of payments. The risks incurred under different classes of members have been shewn to vary, and the difference of age at admission proved to have a great influence over the magnitude of the risks. The truth of no fact has been better established. It is therefore only just that members should pay in proportion to the risks they impose on the lodges. For if a member at age 20 be required to pay £2 7s. (see Table XIX.) for an allowance of £1 per week during sickness, one entering at age 40 ought to pay £4 13s. 6d. yearly ; but suppose he were admitted on the same annual payment as the other, in order to compensate for the loss which the old age would thus entail, an entry money or fine of no less than £41 12s. 9d. would be required ; or if the allowance in sickness were only 10s. per week, one half that amount of entry-money. It is needless to remark, that it would be quite impracticable to get workmen generally to pay such



sums ; at younger ages the entry-money would be less, but still too high and practically exclusive. At 30 years of age the entry-money for £1 per week in sickness would be £17 8s., and for 10s. per week £8 14s.

This will be enough to expose the folly of proposing to admit members of all ages on a uniform scale of payments. No other course is open but to have rates graduated according to age. There may still, from other considerations, be an entry-money of a small amount enforced, but not sufficient to make up for the differences of age. The above illustrations apply only to the sick allowance ; but if the provision or assurance at death had also entered into the question, the entry-money would have been higher, and the difficulty increased. Arrangements might also be easily made to admit of every member paying according to his means, and receiving proportionate benefits, and thus embrace every class of the community.

It is hoped that, while the preceding observations will satisfy the members of the Manchester Unity of the great need of immediate reform, and in some degree assist in establishing their institution on a secure foundation, other Friendly Societies may also derive from them useful suggestions for their future guidance.

The illustrations of the condition of the various grades of Friendly Societies, given in the preceding pages, have been made as general as possible, in order to insure their being readily understood by the members, to whom they were more particularly addressed. It will be necessary, in every instance where any practical application is made of the facts presented, to use every caution in the selection of those examples which strictly belong to the case in point ; and it is hoped that the marked differences which have been shewn to prevail between the rates of mortality and sickness, under the many modifications as to condition and peculiarity of employment and rank in society, will be a



sufficient guarantee against the indiscriminate use of the general results for the government of individual classes, whose circumstances differ widely.

Attention is again particularly directed to the observations and facts in pp. 42-52 on the Government Analysis of the sickness experienced by Friendly Societies during the quinquennium 1846-50, and printed in Parliamentary Papers No. 955 of 1853, and No. 506 of the year 1854. Since the disastrous publication of the Highland Society's Tables in 1824, perhaps no other so unfortunate event as the publication of what is termed the Government Tables has arisen in the history of Benefit and Friendly Societies, and into the nature of the mischief likely to be occasioned by it, I have fully entered in the pages already referred to. A careful perusal of those observations must satisfy every one having a practical knowledge of the management of Friendly Societies of the imminent danger of circulating such documents under Government sanction. If those entrusted with the Analysis of the Government Sickness Returns had but asked themselves the simple question—What is the true object of a Friendly Society? it is impossible they could have excluded from their analysis “chronic ailment,” “mere decrepitude,” “slight paralysis,” “blindness,” “mental disorder,” and “senile infirmity,” and have only included in the published results, presented for the guidance of Friendly Societies in the country, “sickness incapacitating from labour, *requiring constant medical treatment*, and of *limited duration*.” The object which a working man has in view in joining a Benefit Society, is not only to provide for sickness of *limited duration, requiring constant medical treatment*. If this were the only purpose of Friendly Societies, they would be nothing more than a delusion and a curse to a provident working man. Against sickness of *limited duration*, men, whose prudential habits are sufficiently strong to retain

their membership in Friendly Societies for two or three years, can, with a struggle, make provision even without the aid of a society; but how many working men can contend against the vicissitudes of any description of "*chronic malady*," or protracted sickness? The true object and mission of Friendly Societies, when properly considered, and as regarded by the working man himself, is to afford him a competent support and complete independence during periods of sickness, incapacity, and disease, however protracted; and it is to accomplish this object that not only the earliest but the most recently and best organized societies make special provision. Their object is not to form a stepping stone to aid the industrious and prudent to pass from the active and manly independence of their days of vigorous labour to the degraded pauperism of the workhouse. Were Friendly Societies so constituted, they would be a disgrace to the country, and could never receive the support and sympathy of the people.

This is, however, the only practical effect which the general dissemination of the two Parliamentary Papers referred to can have, for by causing Friendly Societies to adopt scales of contributions and benefits which make no provision for those very vicissitudes which are in fact the most trying to a member's independence, he is, at a time when the least prepared for it, declared off the funds of the Society, and has of course no alternative but to take shelter under the roof of the workhouse. That this is the real direction and tendency of these Parliamentary Papers is fully shewn, in the Appendix to the First Report of the Registrar of Friendly Societies in England and Wales, dated the 18th July, 1856, and ordered by the House of Commons to be printed 21st July, 1856. The portion of the Appendix in question commences in page 37, and is entitled "Suggestions by John Tidd Pratt, Esq. the

“ Registrar of Friendly Societies in England, for the  
 “ establishment of Friendly Societies; with Tables of  
 “ Contributions for payments in sickness, &c.”

In page 39 he states that “ provision should be made in  
 “ the rules that nothing but sickness incapacitating from  
 “ labour, and requiring constant medical treatment, and of  
 “ limited duration, as contradistinguished from chronic  
 “ ailments and mere decrepitude, should be provided for,  
 “ and that slight paralysis, blindness, mental disorder, or  
 “ senile infirmity should not entitle a member to sick-  
 “ relief from his society.” And again, at page 48, it is  
 stated that the Tables “ are not intended to meet the case  
 “ of chronic infirmity demanding little or no medical  
 “ attention.”

This is certainly a most extraordinary suggestion to come from one holding an appointment of so high pretensions. It would be interesting to know the Registrar's views of what the establishment of a Friendly Society is meant by him to effect. It surely cannot be his object to work out a mere problem in medical science, in order to determine the relation between acute and chronic diseases; and still looking at his suggestions in the most favourable light it is possible to regard them, no one can conclude that there is any intention to make Benefit Societies self-supporting Provident Institutions, which shall, during the physical vicissitudes to which all flesh is heir to, render their members independent of the parish and the workhouse. A distinct provision is suggested to be made in the Rules to prevent members from receiving any relief during “ chronic infirmity demanding little or no medical atten-  
 “ tion.” Admitting, therefore, that it is quite possible for the members of a society to discriminate between cases of “ chronic ailment and infirmity,” in a way to effectually prevent litigation with sickness claimants, let us see what would be, under such circumstances, the position of the

members of a society formed on the model recommended by the Registrar. On referring to the preceding pages, a considerable amount of data will be found, showing the ratio of protracted sickness to sickness generally. After the age of 40, it will be seen, from Table XIII., that the ratio of the number of persons suffering from protracted sickness to the total number of persons actually sick increases very rapidly, and during the term of life 41-70 the average ratio is as high as 14·5 per cent., the shortest duration of any one attack of such protracted sickness being one year, while many of them are of course of several years' duration. In the decennium of life ages 61-70 the cases of protracted sickness extend to nearly 48 per cent. of the whole number. In the Appendix to Mr. Ratcliffe's Report, already referred to, and published with the Quarterly Report of the G.M. and Board of Directors for January 1853, will be found some valuable information on this question; but the form in which the results are presented by Mr. Ratcliffe does not show the number of members subject to protracted sickness, but simply the average amount of that sickness to all the members of the lodges over which the observations extend.

Average Sickness per Member experienced, in Weeks.							
Ages.	Within the first 12 months.	Within the second 12 months. (a)	After the second 12 months. (b)	Table IV. Total, whether of short or long duration. (c)	Ratio of (a) to (c)	Ratio of (b) to (c)	Ratio of (a) + (b) to (c)
23	·6677	·0204	·0160	·7046	2·8952	2·2708	5·1660
28	·7081	·0293	·0276	·7652	3·8291	3·6069	7·4360
33	·7579	·0492	·0542	·8607	5·7163	6·2972	12·0135
38	·8373	·0594	·0814	·9783	6·0718	8·3205	14·3923
43	·9963	·1070	·1240	1·2274	8·7176	10·1026	18·8202
48	1·2101	·1616	·2530	1·6249	9·9452	15·5702	25·5154
53	1·2882	·3311	·5764	2·1959	15·0781	26·2489	41·3270
58	1·7900	·5628	1·1111	3·4839	16·1543	31·8924	48·0467
63	2·7253	1·1421	1·8972	5·7655	19·8092	32·9061	52·7153
68	3·1666	1·3142	2·4712	6·9265	18·9735	35·6775	54·6510



It will thus be seen that the average amount of sickness, in column (6) of this abstract, experienced within the second twelve months of sickness, ranges from 2·8952 per cent. to 19·8092 per cent. of the total sickness to which the members are liable; and the average amount of sickness, in column (7) experienced after the second twelve months' illness, varies from 2·2708 per cent. to 35·6775 per cent. of the total sickness; the ratio of protracted sickness to the whole amount of sickness, in both columns, increasing with advance of age, as shewn in columns (6) and (7). If attention be now given to the results of column (8) of the preceding abstract, they will be found to throw considerable light on the painful condition in which those societies which, following the advice of the Registrar, adopt the Government Tables, must be placed. It will be there seen, that the protracted sickness varies from 5·1660 per cent., of the total sickness, at age twenty-three, to 54·6510 per cent., at age sixty-eight. The following shews corresponding results from the experience of the five years 1856-60. It will be observed, that the duration of sickness extending over the first twelve months, is greater throughout the whole term of ages therein enumerated, and the same is the case in the fifth column, representing sickness, whether of short or long duration.

Age.	Average Sickness per Member experienced, in Weeks.						
	Within the first 12 Months.	Within the second 12 Months. (a)	After the second 12 Months. (b)	Total whether of short or long duration. (c)	Ratio of (a) to (b)	Ratio of (b) to (c)	Ratio of (a)+(b) to (c)
23	·7947	·0187	·0100	·8234	2·2710	1·2144	3·4854
28	·7663	·0278	·0271	·8212	3·3852	3·3300	6·6852
33	·7933	·0408	·0638	·8979	4·5439	7·1054	11·6493
38	·8741	·0627	·1252	1·0020	5·9040	11·7890	17·6930
43	1·0185	·0920	·1846	1·2951	7·1037	14·2537	21·3574
48	1·2518	·1223	·2650	1·6391	7·4614	16·1674	23·6288
53	1·6218	·2065	·4267	2·2550	9·1574	18·9130	28·0704
58	2·1100	·3862	·8567	3·3529	11·5183	25·5510	37·0693
63	2·8701	·6386	1·7430	5·2517	12·1598	33·1892	45·3490
68	3·7192	·9611	3·3954	8·0757	11·9011	42·0446	53·9457



These results, with those already quoted from Table XIII. shew abundantly the serious defects in the Government Analysis, but it may be still important to refer to Table QQ, page 448, "Contributions to Vital Statistics," in which will be found some curious information on the relation of permanent to temporary sickness under various forms of disease, and it will be found that in Class IV. Diseases of the Brain and Nervous System, there is the highest ratio of permanent and protracted sickness ; and viewing that fact in connection with the results in Table XIV. page 182, and the Abstract in page 183, of the same Work, it will be seen that after the age of 40, this class of diseases grows rapidly in intensity, and hence the frequency with which, after that time of life, members of Friendly Societies will become claimants for permanent and protracted sickness.

The question now arises, what are the members belonging to those societies, formed in accordance with the advice of the Registrar of Friendly Societies, to do while suffering from this protracted or "chronic" sickness ? They can get no relief from the society, and in his Report and in its Appendix of Suggestions, not a single syllable is written on the subject, in fact all allusion to this important feature is carefully avoided ; and it will also be found that in the published Analysis of the Government Returns themselves, the nature and extent of the "chronic ailment" and mere decrepitude are nowhere given, so that so far as those documents and the Registrar's instructions are concerned, the promoters, and those interested in the management of Friendly Societies, have no choice, but to follow implicitly the Government Tables, and permit about one member in seven, of the sickness claimants, above the age of forty, to be drafted to the Workhouse. Had the eliminated elements, in question, been given as a separate and distinct series of results, data would have been available for societies to make the necessary provision for "chronic

“ailment and mere decrepitude ;” but nothing of the kind has been done. It is therefore hoped, that all interested in Friendly Societies will soon become fully aware of the defective and most disastrous aspects under which the results of the Government Analysis of Sickness have been submitted to the public.

I have already shewn, that any one giving attention to the examination of the different witnesses, before the Parliamentary Committees, must have observed a strong tendency, on the part of the members, towards the adoption of Model Tables of Rates of Contributions and Benefits. In Appendix (A) to the Report by the late Lord Beaumont’s Committee, House of Lords, I have furnished some striking illustrations of the varying liabilities to which different societies are subject ; but the additional examples, now furnished, are certainly very curious and remarkable, both in a scientific and practical point of view, and conclusively prove that few things could be more dangerous to the interests of Friendly Societies, than the adoption of Model Tables. There is nothing connected with the study of a statist and the profession of an actuary, requiring more judgment and experience, than the proper discharge of the duties devolving on him in giving advice to Benefit Societies, and every day shews more clearly, that the circumstances in which different societies are placed, are so dissimilar as to render the liabilities of one, no criterion for those of another.

The members of Benefit Clubs and Odd Fellows’ Lodges, should give serious consideration to a point of much importance in the formation and management of these societies. Little has yet been done to urge the necessity of every one of these clubs or lodges having a sufficient number of members to realize an average ratio of sickness and mortality ; but the facts and illustrations, given in the preceding pages, will, it is hoped, lead to more generally

correct views and better practical managements in this respect.

Much is said in the foregoing pages, on the subject of Odd Fellows Societies, and what is written gives a faithful and accurate representation of the state of the order, at the time the 13th edition of "Observations on Odd Fellow and "Friendly Societies" appeared. Since that time, important changes have taken place in the government and management of the lodges, although but little alteration in their financial condition, and it is, however, right that these financial improvements should be pointed out.

At the A.M.C., held at Preston, in May, 1853, a new scale of initiation and an increased ratio of contribution was adopted, for all members admitted into the Unity after the 1st August, 1853. The following is the 145th general law then adopted by the Order:—

"That no person of improper character, nor any one under the age of 18 years shall be made a member of this order, *or any person be allowed to be a member of two lodges in the Unity.* Any member who proposes a person contrary to this law shall be liable to be fined twenty-one shillings, and not less than ten shillings and sixpence, whether the person proposed be admitted or not. The charges for initiation to be as follows:—

		£.	s.	d.
18 and not exceeding	24	0	5	0
24	27	0	7	6
27	30	0	10	0
30	32	0	15	0
32	36	1	0	0

*And every member initiated, in accordance with the above scale, shall pay the following annual payment or contributions in addition to the usual contributions paid by other members.*

			£.	s.	d.
18 and not exceeding	22,	additional annual Contribution	0	0	0
22	24	"	0	0	6
24	27	"	0	2	0
27	30	"	0	3	4
30	32	"	0	4	3
32	33	"	0	4	5
33	34	"	0	5	8
34	35	"	0	6	7
35	36	"	0	7	6

And districts shall have discretionary power to admit persons above 36 years of age *upon payment of £1, and the yearly contributions of the lodge, together with the additional annual payment of 7s. 6d. for each and every year* the age of the person proposed exceeds 36 years. Deaf and dumb persons may be admitted members of the Order."

The consequence of the adoption of this general law is that all members admitted after the 1st of August, 1853, shall, in order to be entitled to the benefits specified, and which may be fairly said to represent the average amount of benefits provided for by the members of the Unity, namely, an allowance of 10s. per week during sickness, a payment of £10 at the death of a member, and £5 at the death of a member's wife, have to contribute according to the following scale:—

Age at Entrance.	Yearly Contribution = (a)	Initiation Fee = (b)	Equivalent Annual Contribution.
	£. s. d.	£. s. d.	£. s. d.
18	} 1 1 8	} 0 5 0	1 1 11
19			1 1 11
20			1 1 11
21			1 1 11
22	} 1 2 2	} 0 7 6	1 2 5
23			1 2 5
24			1 4 2
25	} 1 3 10	} 0 10 0	1 4 2
26			1 4 2
27			1 5 5
28	} 1 4 11	} 0 15 0	1 5 5
29			1 5 5
30			1 6 9
31	} 1 6 0	} 1 0 0	1 6 9
32			1 7 0
33	} 1 8 2	} 1 0 0	1 9 3
34			1 10 4
35			1 10 4

That the effect of the admission of future members into the Order on this scale may be fully seen, and the extent to which the observations made in pp. 79-97 *ante* will be thereby modified, let a parallel case to that discussed in pp. 79-80 be considered. It is there shewn that,

according to the data furnished by Mr. Ratcliffe in his very able and valuable report, and deduced from the actual experience of the Manchester Unity itself, the contributions which should be paid by members aged thirty-two (which according to Mr. Ratcliffe's report, was nearly the average age of the members), in order to provide the precise benefits above specified, is the sum of £1 18s. yearly; while the actual amount required by the above table, which represents the rates adopted at the annual meeting held at Preston in 1853 is only £1 6s. and making allowance for the entrance fee of £1, this contribution is raised to no more than £1 7s. yearly, shewing, even according to the actual experience of the Order, an annual deficit on each member's contributions admitted after July 1853, of no less than 11s. or, in other words, the scale of contributions in the Preston table would need to be augmented upwards of *forty* per cent. to fully provide for the benefits promised to the members of the Unity.

It will also be seen from page 79 that the contributions according to scale No. 1, as prepared by the Board of Directors for the use of lodges in the Unity, and which is still applicable to all the existing members who have been admitted prior to August 1853, equivalent to £1 2s. 9d. annually to provide the same benefits; and, consequently, that scale requires an increase of 15s. 3d. yearly, or about an addition of sixty-seven per cent. to render their contributions commensurate with the benefits promised to this class of the members, who, at the commencement of that year were good on the books, numbered no less than 230,226. It is here evident that so far as all the older members are concerned, the relation of their contributions and benefits remains unaltered from the state of things represented in the preceding pages. It has, however, just been shewn that the New Scale of Contributions for age thirty-two exhibits an annual deficit of *forty* per cent.



From data, however, which will be immediately presented, it appears that the average age of the members admitted to the Unity during the seventeen years 1848-64, was twenty-three and one quarter years, and at this age, according to Mr. Ratcliffe's data, derived from the experience of the Order itself, and developed in Table IV. and Tables XX. XXI. and XXII. it will be found that the annual contributions required for the benefits already specified is the sum of £1 8s 6d. while that according to the Preston Table, after making allowance for the value of the Initiation or Entrance Fee, is only £1 2s. 4½d. being a deficiency of 6s. 1½d. yearly; and, therefore, to make the table at that age self-supporting, the yearly payment would require to be increased upwards of twenty-seven per cent. To this extent will the contributions of all present and future members admitted under the Preston scales be deficient, while the contributions of all those admitted prior to August 1853, will be deficient to the alarming extent of sixty-seven per cent.

It is impossible, with any show of reason, to deny these conclusions. They are derived directly from the experience of the Manchester Unity itself; but had I quoted from my own previously published data, as appearing in the other tables of this paper, and already fully discussed, results almost precisely similar would have been obtained. There are few researches in the domain of vital statistics in which two independent investigations in different fields of inquiry have produced results so strikingly confirmatory of each other.

It may be important to show for quinquennial ages the relation between the two scales now mentioned, and the rates deducible from the experience of the Order, which are necessary to provide the same benefits.

Age.	Yearly Contributions now required from Members who entered the Unity.		
	Prior to August 1853.	Since August 1853.	Required according to the experience of the Unity for all Members.
	£. s. d.	£. s. d.	£. s. d.
20	1 1 8	1 1 8	1 6 2
25	1 1 8	1 3 10	1 10 2
30	1 1 8	1 6 0	1 15 5
35	1 1 8	1 9 3	2 2 5

An examination of the preceding figures will satisfactorily shew the manner in which the financial resolutions of the Preston A.M.C. will affect the condition of the Order. Unless an immense number of the older class of members should secede from the Unity, and relieve it of their liabilities, it is undeniable that the deficit pointed out in the earlier editions of this work may still be held as fairly representing the perilous condition of the Manchester Unity even at this time.

I have good reason for knowing, that it is not the opinion of the best informed members and officers of the Order, that the scale adopted at the annual meeting at Preston, in the year 1853, is high enough in its terms to provide the benefits promised under it, but it is, no doubt, as may be seen in the preceding illustrations, an improvement on those previously in use by the Manchester Unity. The fact is, as I have elsewhere shewn, the Board of Management has struggled for years with the question, and are unable suddenly to carry out a thoroughly sound and amply developed system of financial reform, and looking at all the circumstances of the case, this is scarcely to be wondered at.

There can be no doubt whatever, that notwithstanding the recent changes effected by the Preston Table, the rates and contributions required of the members are still entirely inadequate to provide the benefits promised, and, unless

some very marked improvement be made in the adjustment of benefits and contributions, the Manchester Unity can never become a great and useful provident institution. If its present scheme does not undergo such modifications as have been clearly shewn to be necessary by its own data and experience, the Unity must either speedily disappear, or continue in the unsettled, unsatisfactory, and unstable condition in which it has been for the last twenty years. An examination of the Quarterly reports of the G.M. and Board of Directors shows that in the triennium 1853-5, no less than 47,274 new members entered the Unity. This should act as a warning. The directors remark in one of their reports, " That the amount of initiation money received " from members in 1844, being no less a sum than " £49,382 it will be observed, on reference to the list of " lodges, that our increase of members in that year was " only 21,461, and by these returns it is clearly proved " that upwards of 40,000 members were initiated in 1844, " thereby at once affirming that upwards of 20,000 mem- " bers left the Order in one year, after paying their initi- " tiation money and contributions for a length of time. " We are of opinion that the particular attention of the " members of the Order should be drawn to this important " fact, with a view of arriving at the true cause why so " many leave the Order."

It would hence appear that the same lamentable state of things continues, for, notwithstanding the large number of new members joining the association, 47,274 having entered during the three years 1853-5, and, as hereafter shewn, the admissions were in preceding years in even a higher ratio, still the members have not increased since the beginning of 1844 to end of 1855. At the former date, the number of members is represented in one of the directors' reports to be 251,727, and now we find, from the quarterly report for April 1856, that, at the beginning of that year,

the number good on the books was 251,008. That is, perhaps, the very worst circumstance which can be urged against the present state of the Manchester Unity. The influences must be very powerful which have caused so many members of late years to desert the Order in this wholesale manner, and is no doubt one of the reasons why many lodges have augmented their funds even with a scale of contributions, which would, under a normal and less perturbed state of membership, be ruinously low and inadequate. It happens to be within my knowledge, that when valuations of the assets and liabilities of some of the lodges have been made, that although they were found to be charging insufficient contributions for the benefits granted, still they were declared to have a surplus of assets over liabilities, and this fact was accounted for by the great number of members leaving the lodges and sacrificing their initiation money and their contributions for several years.

This fluctuating condition of membership is much to be deplored, and I am afraid it will long continue, unless by a speedy and proper adjustment of the contributions and benefits, members are led to place greater confidence in the permanence and stability of the order.

It is also important to contrast the condition of the Unity in respect to the number of members within the twelve years subsequent to January 1844, with that of the immediately preceding ten years.

In the year 1834 the number of members in the Unity was about 60,000; in January 1844, it had increased to no less than 251,727, being an absolute increment, after allowing for deaths and withdrawals, of more than 19,000 per annum; but within the succeeding twelve years no increase would appear to have taken place, although these latter years constitute undoubtedly the period of greatest prudential progress in the history of Benefit Societies. It must be admitted that the gigantic proportions of the

Manchester Unity have attracted so much public attention to its affairs, and the question of its stability has within those years been so openly and freely discussed before Parliamentary Committees and elsewhere that it was impossible for members to repose the same confidence in the safety and permanence of the institution which they willingly lent to it during the earlier period of years.

It is highly important for those taking an interest in this great Friendly Society to understand clearly the nature and extent of the changes going on amongst the members in recent years, and the following succinct Abstract has, from the data furnished in the Quarterly Reports, been prepared for that purpose.

It will be seen from the following figures that in six years no less than 88,033 new members entered the Unity. The number of deaths amounted to 15,425; but the large number of 52,022 members seceded from the Order from the various causes assigned in the next Abstract. It has already been stated that on the 1st of January, 1856, the number of members was 251,008, and from the succeeding Abstract it will be found that the new members initiated during the eight preceding years was 108,410, or about 43 per cent. of the existing members. It is further shewn in the Quarterly Reports that on the 1st January, 1846, the Order numbered 259,374 members. This number, it will be seen, gradually fell, until on the beginning of 1853 it reached 224,441, and from that time it has increased in the rapid manner shewn in the preceding and subsequent Abstracts.

This great fluctuation in the members, the unprecedented number of initiations, and the equal number of withdrawals keeps the Unity, as already remarked, in the most unsettled, unstable, and unsatisfactory condition. Were its financial arrangements placed on a secure basis, more confidence would be inspired, the privilege of membership



Year.	Members less than Twelve Months in arrears on the first day of the Year.	New Members initiated.	Deaths.	Lodges Suspended for non-compliance.		Lodges Expelled from the Unity.		Lodges Closed by a Division of Funds.		Lodges Closed by want of Funds, small Number of Members, Failure of Banks, &c. &c.		Lodges Seceded from the Unity.		Lodges Amalganated with other Lodges.	Number of Members who have ceased to belong to the Unity on their own account.
				Number of Lodges.	Number of Members.	Number of Lodges.	Number of Members.	Number of Lodges.	Number of Members.	Number of Lodges.	Number of Members.	Number of Lodges.	Number of Members.		
1850	*224,878	10335	2189	..	..	1	51	73	1809	..	..	32	1641	30	4846
1851	229,975	10213	2451	18	1012	4	137	34	1324	6	98	23	1637	36	8608
1852	225,194	10712	2565	11	1011	4	225	37	1447	3	47	11	537	16	5581
1853	224,441	16618	2728	11	654	2	144	23	813	18	615	11	654	21	3188
1854	232,228	18836	2768	8	336	1	46	15	539	..	..	..	..	20	6876
1855	240,499	21319	2724	..	..	2	39	9	360	13	157	7	286	19	7244
Total,		88033	15425	48	3013	14	642	191	6292	40	917	84	4755	142	36403

\* Good on the Books only.

would be more valued, and no doubt seceders greatly reduced in number.

For a variety of important purposes the following figures, taken from the Quarterly Reports, throw valuable light not only on the present condition of the Unity, but the economic and moral state of the working classes generally, and they should be carefully studied by every one watching the social progress of the day. In the "Contribution on "Criminal Statistics," pp. 303, 369, and 403 of "Contributions to Vital Statistics," it will be found that the period of life of highest criminal intensity is ages 21-25, and hence arises the important practical bearing of all Benefit Societies on the moral condition of the people. Those are the very ages when admission to Friendly and Odd Fellow Lodges is most easy, and the following Abstract shows that as many as 42·983 per cent. of all the admissions took place between those ages. Viewing in connection with these results the well-known fact that the least criminal portion of the whole community is represented by those who attach themselves to Benefit Clubs and Odd Fellow Lodges, it is evident that, by means of these societies, a very powerful and most beneficial influence may be exercised over that most important section of the population whose habits are as yet unformed, who have just entered upon the period of life of greatest criminal temptation, but who are still at the same time the most susceptible of acquiring those prudential feelings which find their best expression through the medium of their own Provident Institutions. Afford a young man the opportunity of joining well-organised societies, and the respect he has for the opinion of his fellow-members will exercise a powerful check on his criminal propensities.

The following gives the number of members who have joined the Manchester Unity of the Independent Order of Odd Fellows during the eight years 1848-55.

Ages.	Admission in the Years 1848-55.	Ratio of Admission at each term of life.	Ages.
18 to 20	33,704	31·089	18 to 20
21 .. 25	46,598	42·983	21 .. 25
26 .. 30	21,072	19·437	26 .. 30
31 .. 35	6,346	5·854	31 .. 35
36 and upwards.	690	·637	36 and upwards.
Total .	108,410	100·000	Total.

From the preceding figures it will be seen that during the eight years, 1848-55, no less than 74·072 per cent. of all the admissions took place under twenty-six years of age, and the large proportion of 93·509 per cent. at ages not exceeding thirty.

The following shews the number of admissions into the Unity during the next nine years 1856-64 at each term of life.

Ages.	Admission in the Years 1856-64.	Ratio of Admission at each term of life.	Ages.
18 to 20	75,806	32·830	18 to 20
21 .. 25	98,887	42·825	21 .. 25
26 .. 30	40,096	17·366	26 .. 30
31 .. 35	13,776	5·967	31 .. 35
36 and upwards.	2,346	1·012	36 and upwards.
Total .	230,911	100·000	Total.

From this it appears that during those nine years no less than 230,911 members were admitted, and that during the eight years immediately preceding as many as 108,410, making the admissions during the seventeen years 1848-64 amount to as many as 339,321 ; but, on the 1st of January, 1865, the total number of members in Great Britain, Ireland, Channel Islands, &c., &c., was returned at 355,015, so that the total admissions during the

seventeen years formed upwards of 95 per cent. of the whole existing number at the beginning of 1865.

In 1848 the Unity contained about 230,000 members ; since then 339,000 have entered, and the number of deaths within that period has been about 53,000, so that it follows that 160,000 have in the same time left the Unity from one cause or another.

The following shews the progress of the Unity since the beginning of the year 1855 :—

Year.	Number of Members.	Number of Deaths of Members.	Number of Deaths of Wives.	Mortality per cent. of Members.	Year.
1855	240,499	2,724	2,070	1·130	1855
1856	251,008	2,811	1,918	1·111	1856
1857	262,833	3,077	2,115	1·174	1857
1858	276,254	3,296	2,374	1·193	1858
1859	287,573	3,275	2,384	1·138	1859
1860	305,214	3,634	2,549	1·191	1860
1861	316,251	3,731	2,639	1·180	1861
1862	335,160	3,852	2,719	1·180	1862
1863	342,953	4,170	2,780	1·216	1863
1864	258,556	4,560	2,997	1·334	1864

Since the beginning of 1853, when the number of members was 224,441, the Unity has increased in members as above represented. However, in the year 1846 the number of members was 259,374, and the number decreased until 1853. In the year 1841 the number of members was 179,545, and from that time it increased rapidly, until 1846, when it again began to decline.

The preceding tabular statement gives the gross number of members in the Unity, but the numbers in Great Britain, Ireland, Channel Islands, &c. were on the

1st January, 1863 . . . 328,595 members, and  
Do. 1865 . . . 355,015 do.

The average age of the members admitted during the eight years 1848-55 was 23·2 years, and the average age

of those admitted during the nine years 1856-64 was 23·3 years, or for the whole period of seventeen years the average age was  $23\frac{1}{4}$ ; but it appears that the average age of all the members in the Unity during the five years ending 1860 was about 36·9 years, or nearly 37 years. This last result is derived from the figures given in Table VII., pp. 20-1, of the Sickness Returns for 1856-60. Hence it is evident that although the members admitted during the seventeen years mentioned amounts to 95 per cent. of all the members existing at the beginning of 1865, that an immense number of the constant withdrawals from the Unity must be those of recently admitted members. This is a very unsatisfactory feature of the Institution's operations.

At the A. M. C. held at Birkenhead in 1864 a new Scale of Contributions was recommended and adopted, to be applicable to all members admitted after the 1st of August of that year. This scale was arranged so as to provide different amount of sickness benefits, up to twenty shillings a week, the contributions being varied accordingly.

The following are the rates, at various ages, to provide sick pay of 10s. per week during the first twelve months, and 5s. for any sickness after a continued twelve months' sickness; £10 at the death of a member, and £5 at the death of a member's wife. The rates for other amounts of benefits are in the same ratio.

Lunar Monthly Contributions.					
Age.	Contribution.	Age.	Contribution.	Age.	Contribution.
	<i>s. d.</i>		<i>s. d.</i>		<i>s. d.</i>
18	1 6	27	1 9	36	2 4
19	1 6	28	1 10	37	2 5
20	1 6	29	1 11	38	2 6
21	1 7	30	1 11	39	2 7
22	1 7	31	2 0	40	2 8
23	1 8	32	2 1	41	2 10
24	1 8	33	2 2	42	2 11
25	1 8	34	2 3	43	3 0
26	1 9	35	2 3	44	3 2



On comparing this scale with the one adopted at the Preston A. M. C. in 1853, and given in page 110, it will be found that under the age of 33 the contributions are not so great. It is, however, right to state that the above scale only provides for one-half the allowance after a continued twelve months' sickness. The principle of reducing the amount of benefit in cases of protracted sickness is one of the most objectionable features now connected with the scheme of the Unity. It did not formerly generally exist, but now it is carried in the Unity to the most ruinously absurd and ridiculous extent. In pp. 89-90 I have already pointed out the evils and disastrous character of this course, and I deeply regret to find that the Annual Meeting of the Society should so blindly sanction a proceeding entirely destructive of the real character of any Benefit Society. Some of the Tables adopted provide for a Sickness Benefit of only 2s. 6d. weekly after continued sickness of twelve months. It is hard to believe that members could really be in sober earnest while sanctioning such a regulation. An allowance of 2s. 6d. a week is worse than the lowest grade of pauperism ! What is it possible for a member suffering from a protracted or permanent illness possibly do with only 2s. 6d. a week ? Without other means he must be forced into the workhouse, and surely that is not the condition of things for which an Independent Order of Benefit Society should make provision. If the Scale of Contributions be inadequate to provide the full Sickness Benefit, the plan is neither the wise nor the honest one to break down the Sickness Allowance to a non-sustaining amount, and which will lead a number of the members imperceptibly into the union and the workhouse. Let the proper and open course be boldly followed, and the contributions sufficiently raised to provide an adequate Sickness Allowance during the longest continued illness. Unless this be done the Unity

becomes a mere mockery of a Friendly Society. Until now great hopes were entertained that the Order was earnestly endeavouring to improve its condition so as to be a model society.

The Directors, in the Quarterly Report for October 1864, draw attention to "the Tables, which, although quite sufficient for future members, leave no margin for making up previous deficiencies; and where the payments for existing members are insufficient for the benefits promised, lodges and districts should consult with some experienced person as to what would be the proper payment, and take steps for its adoption."

"When lodges continue full benefits to members for life, it is evident the payments must be considerably higher than for benefits in periods." (That is, decreasing benefits.) "When the present rules give these benefits, lodges should at once consider whether such benefits can be maintained when the liabilities occur, and whether they cannot either increase their contributions or limit the benefits."

The suggestions to limit or reduce the benefits is a very dangerous one. The financial records of the Order shew that the average sickness allowance actually paid by the lodges collectively is about 10s. weekly, and any great reduction in that amount, such as to bring it to 5s. or 2s. 6d. weekly, would be fatal to the use of the institution as a Friendly Society.

There can be no doubt that the past deficiencies of the lodges are enormous, and, when this was pointed out to them years ago, the fact was almost universally repudiated; but now the Board of Directors themselves openly acknowledge it. Although immense numbers of new members are now being admitted, they must leave the Order in large numbers shortly after. The great difference in the average age of the whole members in the aggregate so much ex-

ceeding the average age at admission distinctly proves this to be the case, and the accrued deficiency in the assets of the Order must, therefore, be exceedingly large. To show this, I shall take the case of a large and important district, embracing upwards of 10,000 members, and of which I possess all the data necessary to determine the extent of its assets and liabilities. The ages of the members range from 18 to 74; but it is unnecessary to give these details here, although they are employed in the calculations from which the following results are derived. In the first of the illustrations given it should be explained that the calculations are made on the data of mortality and sickness, as given in the "Observations on the Experience of the "Unity for the years 1856-60," as contained in the Reports of the Order. I shall hereafter remark on this experience and its applicability to such a purpose, and first I shall give the results as if the reduced allowance in cases of protracted sickness did not exist in practice.

Present value of Sickness Benefit . . .	£356,138
Death Benefits—members and wives . . .	74,376
	<hr/>
Total Liabilities. . .	£430,514
Present value of Contributions .	£195,041
Realised Capital . . . . .	76,260
	<hr/>
	271,301
	<hr/>
Difference or deficit	£159,213
	<hr/> <hr/>

Hence it appears there is an existing deficiency in the assets of the district referred to of no less than £159,213. If, however, the regulations introduced into the new Tables of the Order, approved at the A.M.C. at Birkenhead, of reducing benefits in cases of protracted sickness were made to apply not only to new members, but to all existing

members, the total liabilities on account of sickness in the district would be reduced to the extent of £78,809, and the deficit in the assets will amount to £80,405.

There is, however, connected with the preceding results, an important fact to be kept in view ; the Table from which they are derived is founded on the sickness experience of the Order at all ages. Some years ago, I pointed out this mistake, in regard to the Table formed on the experience of 1848-50, and the same observations are applicable to the more recent Tables. An inspection of the second column of pages 20-1, of the Report on Sickness, will shew that above the age of 65, the experience is derived from only 7,006 years of life, and these are spread over twenty-nine years or ages. As formally suggested, I now say, keep to the actual experience of the Order, so long as that is fairly applicable ; but the experience above age 65 is evidently too scanty to receive any confidence, and in the fourth paragraph of page 84, Mr. Ratcliffe appears to admit this much. In "Contributions to Vital Statistics," however, a single class of the results therein given in pages 26-7, includes above the age of 65, as much as 41,430 years of life, and throughout the same work there is much further evidence from additional experience of sickness at advanced ages, seeing that up to that age, the sickness experience of the Unity, is almost identical with the results in "Contributions to Vital Statistics," and remarkable evidence of this will be presently produced. Why should Mr. Ratcliffe not have added that experience to that of the Unity at the younger ages ? It cannot be, that because doing so would have given an increased value to the whole life liabilities, that it has not been done. However, in order to shew the more probable condition of the district under review, I have constructed an Auxiliary Table, founded on the recorded mortality of the Unity, throughout the whole of life ; the actual sickness experienced



in the Unity up to age 65, and above that age the ratio of sickness in “Cont: Vit: Stat:” This Auxiliary Table will be found hereafter. The valuation of the district affairs by this Table, gives the following results:

Present value of Sickness Benefit . . .	£417,525
Ditto Death Benefits—members and wives .	74,376
	<hr/>
Total Liabilities . .	£491,901
Present value of Contributions .	£195,041
Realized Capital . . . . .	76,260
	<hr/>
	271,301
	<hr/>
Difference or deficit .	£220,600
	<hr/>

Here is a deficit actually amounting to £220,600; but if the deductions, on account of reduced allowances during protracted sickness, be made, they will amount to £92,393, and will make the preceding deficit £128,207. These figures certainly represent the affairs of the district in the most favorable light in which they can be viewed. In order to shew, however, the almost identical agreement of the sickness in the Unity, with that recorded in “Cont: Vit: Stat:” I have constructed an Auxiliary Table, on the mortality of England and Wales Friendly Societies “Contributions” Table F, page 32, and the ratio of sickness as experienced in the Order, as described for the last estimate; so that this Table will differ from the last mentioned, only in respect to the mortality; and the following are the results arrived at:

Present value of Sickness Benefits . . .	£511,958
Death Benefits—members and wives . . .	70,000
	<hr/>
Total Liabilities . .	£581,958
Present value of Contributions .	£195,844
Realized Capital . . . . .	76,260
	<hr/>
	272,104
	<hr/>
Difference or deficit .	£309,854
	<hr/>



There is, in this instance, a deficit of £309,854, and if a deduction be made for reduced allowances in long continued sickness, it will amount to £113,290, exhibiting under those circumstances the reduced deficit at £196,564. This is a very large amount, but let us compare it with the results to be derived from using both the rate of mortality and sickness in "Contributions to Vital Statistics."

Present value of Sickness Benefit . . .	£500,360
Death Benefits—members and wives . . .	70,000
	<hr/>
Total Liabilities. . .	£570,360
Present value of Contributions .	£195,844
Realized Capital . . . . .	76,260
	<hr/>
	272,104
	<hr/>
Difference or deficit	£298,256
	<hr/>

In this case the difference or deficit of Assets is £298,256, differing but little from the estimate immediately preceding, and if the deduction be made for reduced benefits in long continued sickness, it amounts to £110,724, produced a reduced deficit of £187,532, but in the last estimate the deficit was £196,564, and all the elements of the two were identical, except the sickness, shewing that the one rate of sickness may for all practical purposes be used for the other. The sickness in the Unity is, however, the greater, although the difference is exceedingly small.

If this be the state of things in this large district, what must it be in the whole Unity? It has already been stated that the average age in the order during the five years 1856–60 was about 37 years, but in the district now considered the average age at the beginning of 1865 was  $34\frac{1}{2}$  years. Over the whole Unity, therefore, it is likely that the liabilities is in a much higher ratio than in the district referred to, but it is to be feared that the rest of the

Unity is much less prepared to meet their liabilities than the district. It has been seen that at the beginning of 1865 the district possessed funds amounting to £76,260, and we find that in the year 1864, the funds held by 302,530 members was £1,666,292, but if these had possessed capital in the same ratio with that in the hands of the district it should have amounted to £2,310,070. If the affairs of these members were, therefore, investigated the deficit would equal at least thirty times that of the district, and this would give, according to the deficit of either the second or third of the preceding estimates, a gross deficiency of £6,618,000 by the one and £9,295,620 by the other estimate, but by making allowance for reduced sick pay in long continued illness, so as to apply to both new and old members, the gross deficiency by the one estimate will be £3,846,210, and by the other it will be £5,896,920. These two last statements exhibit the most lenient view which can be taken of the affairs of the Unity, for they make full allowance for reduced benefits in sickness, and to do this is to sacrifice the great principle characteristic of all properly constituted Friendly Societies. The reduced deficit will apply, unless the limited allowance in all long continued sickness take effect on old as well as young members.

The district to which reference has been made contained at the time specified 82 lodges, of which

1	was opened in	1823.
16	„ „	1837-41.
38	„ „	1842-4.
12	„ „	1845-7.
5	„ „	1855-60.
10	„ „	1861-4.

These lodges, it will be seen, are not of exactly recent origin, 67 of them have, and they had, an average duration

of 30 years, and contain 9,429 members, the remaining 15 lodges have an average duration of five years and contain 1,001 members. It will be seen that the average age of admission of members during the 17 years 1848-64 was  $23\frac{1}{4}$  years, and assuming the same to have been the case when these lodges were formed we should have a large number of the members at least 40 years of age, and accordingly from the return of the lodges I find there are 2,852 members above the age of 40, or an average of 42 members above that age to each of the 67 lodges.

On the 1st of January, 1865, the Manchester Unity in Great Britain, Ireland, Channel Islands, &c., consisted of 3,344 lodges with 355,015 members. Of these 2,791 lodges, having 302,530 members, made returns of their income and expenditure for the year 1864. During that year 28,458 new members were admitted, which according to the general rules should have produced £9,751 of initiation money, but the actual receipts on that account were £10,365, shewing that a greater fee is charged in some districts than is provided for by the general rules. The following are the items of receipt and expenditure for the year 1864:—

	£	s.	d.
Contributions received . . . . .	278,971	10	10
Admission Fees „ . . . . .	10,364	15	11
Interest „ . . . . .	53,771	13	9
	<hr/>		
Total income . . . . .	£343,108	0	6
	£	s.	d.
Sick Benefits paid . . . . .	184,801	5	11
Funerals paid . . . . .	56,211	11	1
	<hr/>		
	241,012	17	0
	<hr/>		
Difference, Excess of Income . . . . .	£102,095	3	6
	<hr/>		

It thus appears that during the year 1864 there was an excess of income over expenditure of £102,095; being

nearly 27 per cent. of the receipts. To ordinary observers this might seem to be satisfactory, but to careful inquirers the result is very different. On referring to the Account of the Income and Expenditure for the Year 1844, the above will be found much less favourable. In 1844 the ratio of payments for Sickness and Funerals was 57 per cent. of the receipts from Contributions and Initiation Money. The Admission Fee was then higher, but, making allowance for that, the Expenditure on Sickness and Funeral Benefits was not 64 per cent. on the Contributions and Initiation Money of the year; but, according to the preceding statement for 1864, the cost of the Sickness and Funeral Benefits amounted to 82 per cent. of the Receipts for Sickness and Funerals. In this light the financial affairs of the Unity are growing very much worse.

The following shews the State of the Funds in Seven of the Principal Counties at the beginning of 1865 :—

County.	Members.	Funds.			Per Member.		
		£.	s.	d.	£.	s.	d.
Chester . . . . .	12,565	63,201	15	4	5	0	7
Derby . . . . .	13,807	51,987	5	9	3	15	8
Lancashire . . . . .	49,690	238,916	11	11	4	16	1
Middlesex . . . . .	20,385	142,220	7	4	6	19	7
Norfolk . . . . .	11,472	85,975	15	2	7	9	10
Stafford . . . . .	10,247	70,850	0	1	6	18	3
Yorkshire . . . . .	45,627	205,525	15	4	4	10	1
United Kingdom . . .	302,530	1,666,292	0	2	5	10	1

The Funds held by these Counties differ widely, being from £7 9s. 10d. to £3 15s. 8d. per Member, and the Funds in the District of 82 Lodges we have been considering are £7 6s. 4d. per member.

The formation of an Auxiliary Table founded on the recorded experience of the Mortality and Sickness in the Unity for the five years 1856-60 has been referred to. The Rate of Mortality throughout the whole of life is taken

from page 25 of the Report, that of Sickness from page 34, only after age 65 the Sickness, for reasons already assigned, is taken from "Contributions to Vital Statistics." This Table it is believed may be useful to the Order. The original data, however, from which the Mortality and Sickness have been deduced, and are given in the following

TABLE XX.

Age.	Sickness and Deaths for Quinquennial Period Oddfellows' Experience, 1856-60.				
	Population.	Deaths.	Sickness.	Mortality per Cent.	Average Sickness Yearly.
18-20	20,869	186	17,259·999	·8912	·8270
21-25	155,819	1,140	128,482·713	·7716	·8246
26-30	167,318	1,287	137,526·145	·7569	·8125
31-35	150,000	1,262	131,011·715	·8414	·8733
36-40	150,760	1,574	159,332·999	1·0415	1·0568
41-45	130,358	1,552	167,117·000	1·1906	1·2846
46-50	106,094	1,585	170,791·288	1·4939	1·6099
51-55	65,230	1,263	143,553·571	1·9396	2·2007
56-60	37,819	1,044	122,820·143	2·7605	3·2475
61-65	14,999	603	77,619·715	4·0292	5·1749
66-70	4,829	273	37,386·286	5·6533	7·2419
71-75	1,601	124	20,957·288	7·7451	13·0899
76-80	444	51	7,831·572	11·4862	17·6373
81-85	103	14	2,201·859	13·5923	21·2707
86-90	19	2	164·000	10·5263	8·6316
91-94	10	2	145·714	20·0000	14·5714
Total	1,006,272	11,962	1,324,202·007	1·1887	1·3159

From this Table the following auxiliary one, XXI. has been calculated, taking the ratios as given in pp. 25-34 of the Report.



TABLE XXI.

Age.	$\lambda.D_x$	$D_x$	$\lambda.N_x$	$N_x$	$\lambda.N_x^s$	$N_x^s$	Age.
18	4 7689299	58730	6 1109145	1290065	6 4201858	2631393	18
19	4 7523108	56534	6 0914608	1234431	6 4122189	2533102	19
20	4 7357425	54418	6 0718868	1180013	6 4042254	2537538	20
21	4 7192260	52387	6 0521651	1127626	6 3967663	2493253	21
22	4 7028140	50445	6 0322886	1077181	6 3892825	2450657	22
23	4 6864895	48588	6 0122458	1028598	6 3819630	2409700	23
24	4 6702328	46799	5 9920226	981799	6 3748009	2370287	24
25	4 6540272	45084	5 9716075	936715	6 3678002	2332396	25
26	4 6378509	43436	5 9509832	893271	6 3609685	2295982	26
27	4 6216907	41850	5 9301484	851429	6 3543066	2261031	27
28	4 6055238	40320	5 9090900	811129	6 3477811	2227312	28
29	4 5893358	38845	5 8877657	772264	6 3413732	2194690	29
30	4 5731073	37420	5 8661952	734344	6 3350621	2163028	30
31	4 5568233	36043	5 8443535	698801	6 3288387	2132253	31
32	4 5404680	34711	5 8222269	664090	6 3226557	2102111	32
33	4 5240153	33421	5 7998015	630669	6 3164941	2072499	33
34	4 5074485	32170	5 7770635	598499	6 3102543	2042934	34
35	4 4907496	30956	5 7538457	567343	6 3040465	2013940	35
36	4 4738955	29778	5 7305926	537765	6 2977751	1985067	36
37	4 4568614	28633	5 7068304	509132	6 2914178	1956216	37
38	4 4396633	27521	5 6826064	481611	6 2849635	1927363	38
39	4 4223067	26443	5 7581717	455168	6 2784261	1898568	39
40	4 4048030	25398	5 6332361	429770	6 2717968	1869807	40
41	4 3871566	24387	5 6078655	405383	6 2650895	1841152	41
42	4 3693709	23409	5 5820338	381974	6 2582634	1812481	42
43	4 3515335	22466	5 5557086	359508	6 2513523	1783828	43
44	4 3334151	21549	5 5288040	337959	6 2443173	1755162	44
45	4 3150868	20658	5 5014715	317301	6 2371605	1726476	45
46	4 2965192	19793	5 4734987	297508	6 2298757	1697758	46
47	4 2776980	18954	5 4449094	278554	6 2224499	1668975	47
48	4 2585730	18137	5 4156093	260417	6 2148421	1639993	48
49	4 2391262	17343	5 3857403	243074	6 2070155	1610703	49
50	4 2193381	16571	5 3550740	226503	6 1990865	1581563	50
51	4 1991878	15819	5 3236315	210684	6 1907905	1551424	51
52	4 1785596	15085	5 2913600	195599	6 1820756	1520812	52
53	4 1575620	14248	5 2585200	181351	6 1730865	1489593	53
54	4 1360352	13678	5 2244632	167673	6 1636560	1457661	54
55	4 1140484	13306	5 1885545	154307	6 1537975	1424043	55
56	4 0915222	12346	5 1523526	142021	6 1434495	1391392	56
57	4 0679903	11695	5 1150311	130326	6 1315767	1356990	57
58	4 0436513	11058	5 0765240	119268	6 1210945	1321583	58
59	4 0184102	10433	5 0367695	108835 2	6 1089224	1285057	59
60	3 9922044	9822 1	4 9956926	99013 1	6 0959860	1247343	60
61	3 9649460	9224 0	4 9532207	89788 5	6 0822105	1208399	61
62	3 9364529	8638 8	4 9092870	81149 7	6 0675820	1168374	62
63	3 9068839	8070 2	4 8638550	73079 5	6 0520754	1127393	63
64	3 8759513	7515 4	4 8160661	65564 1	6 0347575	1083322	64
65	3 8437154	6977 8	4 7700143	6 8 8 6 3	6 0142118	1033265	65
66	3 8100660	6457 5	4 7195699	52428 8	5 9912202	979986	66
67	3 7748558	5954 7	4 6672110	46474 1	5 9654444	923516	67
68	3 7381750	5472 4	4 6128018	41001 7	5 9367404	864451	68
69	3 6998330	5010 0	4 5562036	35991 7	5 9049518	803437	69
70	3 6597899	4568 7	4 4972470	31423 0	5 8698183	741002	70
71	3 6178581	4140 3	4 4358872	27282 7	5 8311086	677811	71
72	3 5740019	3749 8	4 3716754	23532 9	5 7885114	614485	72
73	3 5278627	3371 8	4 3045143	20161 1	5 7418226	551852	73
74	3 4790059	3013 1	4 2342135	17148 0	5 6909094	490558	74
75	3 4273123	2675 0	4 1605586	14473 0	5 6348127	431333	75
76	3 3723641	2357 0	4 0833593	12116 0	5 5737555	374762	76
77	3 3138214	2059 8	4 0024340	10056 2	5 5069918	321360	77
78	3 2515739	1784 7	3 9175843	8271 5	5 4346151	272029	78
79	3 1860803	1534 9	3 8284408	6736 6	5 3567141	227360	79
80	3 1172536	1310 0	3 7435278	5426 6	5 2739222	187617	80
81	3 0449397	1109 0	3 6352404	4317 58	5 1842512	152845	81
82	2 9694870	932 15	3 5266138	3385 43	5 07896438	122926	82
83	2 8892831	774 07	3 4167171	2610 46	4 9881218	97302	83
84	2 8028863	635 16	3 2956331	1975 30	4 8778146	75477	84
85	2 7088651	511 52	3 1654759	1463 78	4 7574644	57209	85
86	2 6056924	403 36	3 0254779	1060 42	4 6243956	42111	86
87	2 4804140	306 49	2 8773310	753 93	4 4751334	29863	87
88	2 3019659	230 13	2 7191655	523 80	4 3111709	20472 5	88
89	2 2261455	168 33	2 5508030	355 47	4 1266706	13479 4	89
90	2 0790727	120 14	2 3710773	235 33	3 9293014	8497 7	90
91	1 9224220	83 04	2 1809570	151 69	3 7138348	5174 1	91
92	1 7530781	56 75	1 9774492	94 94	3 4722297	2966 4	92
93	1 5784593	37 32	1 7575479	57 22	3 2043669	1600 91	93
94	1 3865864	24 70	1 5166676	32 86	2 9000238	794 37	94
95	1 1749174	14 96	1 2528530	17 90	2 5493466	354 28	95
96	0 9408120	8 73	0 9623693	9 17	2 1242520	138 82	96
97	0 6842073	4 83	0 6374897	4 34	1 6905505	49 04	97
98	0 4047009	2 54	0 0899051	1 23	1 1824147	15 22	98
99	0 0908420	1 23	9 7557749	0 57	0 5705429	3 72	99
100	0 7570702	0 57			0 0718820	1 18	100

The following three Tables contain a condensed Abstract of the Monetary Values deduced from the preceding Table XXI., founded on the experience of the Order in accordance with actual observation.

TABLE XXII.

*Value of an Annuity of £1 yearly, calculated from the actual experience of the Order, during 1856-60.*

Age.	Immediate Annuity, for the whole of life.	Deferred Annuity, to commence at age 70.	Temporary Annuity, to continue till age 70.
	£. s. d.	£. s. d.	£. s. d.
20	21·6842 = 21 13 8	·5774 = 0 11 7	21·1068 = 21 2 1
30	19·6376 = 19 12 9	·8397 = 0 16 10	18·7979 = 18 15 11
32	19·1319 = 19 2 8	·9057 = 0 18 2	18·2262 = 18 4 6
40	16·9213 = 16 18 5	1·2367 = 1 4 9	15·6844 = 15 13 8
50	13·6689 = 13 13 4	1·8902 = 1 17 9	11·7784 = 11 15 7
60	10·0807 = 10 1 7	3·1992 = 3 3 11	6·8815 = 6 17 8

TABLE XXIII.

*Payments to secure the sum of £1 payable at Death, calculated from the actual experience of the Order, 1856-60.*

Age.	Single Payment.	Yearly Payment, during the whole of life.	Yearly Payment, up till age 70 only.
	s. d.	s. d.	s. d.
20	·33930 = 6 9	·01495 = 0 3½	·01628 = 0 4
30	·39890 = 8 0	·01933 = 0 4¾	·02169 = 0 5
32	·41364 = 8 3	·02054 = 0 5	·02324 = 0 5½
40	·47802 = 9 7	·02667 = 0 6½	·03146 = 0 7½
50	·57275 = 11 5	·03904 = 0 9½	·05089 = 1 0½
60	·67727 = 13 6	·06112 = 1 2¾	·10571 = 2 1½

TABLE XXIV.

*Payments necessary to provide for an Allowance of £1 per Week during Sickness, calculated from the actual experience of the Order, during 1856-60.*

Age.	To provide a Sick Allowance up till age 70.		To provide a Sick Allowance during the whole of life.	
	Single Payments.	Yearly Payment, to continue till age 70.	Single Payment.	Yearly Payment, to continue till death.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.
20	33-0134 = 33 0 3	1-4990 = 1 10 0	46-6104 = 46 12 2	2-0548 = 2 1 1
30	37-8268 = 37 16 6	1-9314 = 1 18 8	57-9367 = 57 18 9	2-8009 = 2 16 0
32	39-2125 = 39 4 3	2-0536 = 2 1 1	60-5602 = 60 11 2	3-0083 = 3 0 2
40	44-4443 = 44 8 10	2-6929 = 2 13 10	73-2814 = 73 5 7	4-1080 = 4 2 2
50	50-7261 = 50 14 6	4-0591 = 4 1 2	95-4438 = 95 8 10	6-5065 = 6 10 1
60	51-5511 = 51 11 0	6-9511 = 6 19 0	126-9930 = 126 19 10	11-4608 = 11 9 2

The results in the three preceding Tables were determined from Table XXI. as follows :—

$\frac{N_x}{D_x}$	=	Results in column 2, Table XXII.
$\frac{N_x - N_{x+n}}{D_x}$	=	„ „ 4, „ „
(Column 2—column 4)	=	„ „ 3, „ „
$1 - (1 - v) \cdot \frac{N_x}{D_x}$	=	„ „ 2, „ XXIII.
$\frac{D_x}{N_{x-1}} - (1 - v)$	=	„ „ 3, „ „
$\frac{D_x}{N_{x-1} - N_{x+n-1}} - (1 - v)$	=	„ „ 4, „ „
$\frac{N_x^s}{D_x}$	=	„ „ 4, „ XXIV.
$\frac{N_x^s}{N_{x-1}}$	=	„ „ 5, „ „
$\frac{N_x^s - N_{x+n}^s}{D_x}$	=	„ „ 2, „ „
$\frac{N_x^s - N_{x+n}^s}{N_{x-1} - N_{x+n-1}}$	=	„ „ 3, „ „

Although it may appear, that notwithstanding the improvement in the Preston and it may also be said the Birkenhead scale of contributions on the preceding ones in use, I have still presented a very unpromising picture of the present condition and prospects of the Unity; it would, while doing so, be wrong to conceal the fact of other important changes having taken place since the publication of Mr. Ratcliffe's valuable Report. In the earlier editions

of "Observations on Odd Fellows and Friendly Societies," it was distinctly affirmed that much good would flow from the publication of the results of any such investigations as that subsequently and so ably conducted by him. It is, therefore, most satisfactory to find this view of the matter practically verified.

Since that time, as already stated, the large majority of lodges has improved their rates of contributions, either by increasing the periodical payments, or in lessening the benefits by reducing the amount of funeral gift, and limiting the time to which members are to be entitled to full sick allowance. This latter step, on many grounds objectionable, has only the merit of bringing the contributions and benefits nearer to each other in value. Mr. Ratcliffe has actually calculated Tables for the lodges in which the benefits in sickness will finally be reduced to three shillings per week, and, in old age, to two shillings and sixpence weekly. It can, however, never be meant to reduce Odd Fellow Lodges to so degraded a position; the title of the Order must be altered first. It could never be called an "Independent Order" by thus making it a mere receptacle of infirm paupers for the workhouse. In no instance should the allowance granted to members be permitted to fall below such sum as would be self-supporting. If the rates of contributions be inadequate for that purpose, the proper remedy is to increase them. I am also given, on the best authority, to understand that there is now not a single branch of the Unity which does not keep its management expenses separate and distinct from the funeral and sick-gift funds. This is, indeed, an unmistakeable advance in the right direction. The Unity is also now a registered society. From the Quarterly Report for April 1856, it appears that, at the beginning of that year, "two hundred and ninety-five districts, containing 190,414 members, have registered their laws, and one hundred and thirty-



“ eight districts (including foreign and colonial), containing 60,526 members, still then remained unregistered as districts, but many lodges in those districts have availed themselves of the privileges conferred by the Friendly Societies’ Act, and have registered their rules.” All these societies must, therefore, make quinquennial returns to the Registrar of Friendly Societies, and the preparation of these is certain to lead to inquiry on the part of members, inquiry to discussion, discussion to clearer views and more carefully formed opinions, and thence giving birth to wiser laws and regulations. Some lodges are also adopting the plan of having periodical valuations of their assets and liabilities—a thing some years ago altogether unheard of amongst them. This, if general, would lead to the best results ; but, if deferred until too late a period, lodges may find it impossible to recover themselves from the effects of past deficiencies.

Recently there has been revived, in one or two influential quarters, proposals to establish what are generally termed Yearly Societies. These will be found alluded to in Question No. 477 of Lord Beaumont’s Report, and are undoubtedly the most objectionable of all sorts of Benefit Societies, as the members are simply required to meet the current risks of the year ; they do not recognise the principle which is the foundation of all true Friendly Societies—that of making a provision in youth for the winter of life. This is a principle which the physical laws of nature and the necessities of civilisation impose on the promoters of every Friendly Society ; and it may be easily shewn that, if an attempt be made to evade it, the formation of a permanent Friendly Society is impossible. Let it be assumed that a club is formed on the bases of the contributions providing for the necessities of the year only, and that, in the first instance, the members consist chiefly of young men, ranging from 20 to 30 years of age. On

referring to Table I., it will be found that, for the average of the first period of 10 years a contribution of about 9s., from year to year, would suffice to grant sickness allowances of 10s. a week to those who are invalided. During the next 10 years, when the ages of the original members of the society range from 30 to 40, the contribution for the same benefit will need to be only slightly raised—namely, to 10s. from year to year. Such societies usually balance their affairs at the end of each year, and then begin *de novo*; but whether this be done or not, and a fresh election of members takes place, is immaterial for the purpose of the following illustration. On referring to column (8) of the Abstract on page 102 preceding, it will be found that from 5 to 14 per cent. of all the sickness experienced by members at the periods of life now under review is sickness protracted beyond the period of one year's duration. Again, assuming the society to go on for another period of 10 years, when the original members shall range from 40 to 50 years of age, the contributions from year to year, to provide the same benefits, will require to be increased to about 16s.; but in this decennium the sickness which shall be experienced after 12 months' duration will amount to from about 19 to upwards of 25 per cent. of the whole sickness to which the society is liable, and the sickness which shall actually be experienced after two years invaliding is no less than from 10 to 15 per cent. of the whole. Hence the question arises, would the healthy members of a society thus constituted consent to so severe and almost permanent a burden? Would they not, when balancing their books from year to year, naturally complain and object to the renewal of the membership of those who are receiving so much of the proceeds of their contributions? For example, according to Table XIII., 5 per cent. of the members during the decennium now under consideration would, in lieu of their small contributions,

have received a minimum £26 each, and some of them three or four times that amount; but in the next decennium 14 per cent. of all the members would be in this condition, and the ratio, as shewn in that Table, going on rapidly increasing. Yearly Societies have not, however, existed long enough to go through this ordeal. In the ten years we are now considering, when the ages of the original members range from 50 to 60, a further, and perhaps a more serious practical difficulty is obvious. To provide for the current liabilities, the contributions would need to be nearly doubled, or £1 10s. yearly, and those members who pass on to the next decennium would have to pay the impossible sum, for the time of life, of four guineas a year, exclusive of the payments necessary to make provision for funeral allowance to the member or his wife, pensions or annuities in old age, and the expenses of management of the society.

It is scarcely necessary to argue that, from the physical impossibility of escaping numerous cases of protracted sickness at all periods of life, and the very high ratio of general sickness at the more advanced ages, rendering it impossible for working men at that time to provide for the current liabilities out of their earnings, the management of a "Yearly Friendly Society" is impracticable, unless at the younger ages. Hence exists the usual rule of excluding from such societies all persons from membership beyond a given age—say, 40 or 45. To encourage the formation of such societies would be to inflict a severe blow on all those who might be tempted to join them. They are destructive of the real purpose for which Benefit Societies were originally intended; inasmuch as the old and infirm, for whom Provident Institutions are most destined to do good, cannot avail themselves of them, and they certainly stand in the way of persons entering better-constituted societies, for they draft off members in the vigour of life, and only

retain them until such time as when, from advanced age, the necessarily high scale of contributions practically excludes them from admission to the best class of Friendly Societies.

The experience of all the best-constituted societies demonstrates the impracticability of the working classes joining them in any considerable numbers, except at the younger periods of life—under the age of thirty. From that age to forty, owing to the rapidly-increasing rates of contributions, the numbers are very small, and beyond the age of forty, the numbers become exceedingly limited. Even in the Odd Fellow Lodges, possessing many social inducements to membership, this is borne out in a remarkable manner by the facts set forth in the Abstract immediately preceding. The liability to sickness and death is at a comparatively low ratio at the younger ages, and unless members, by entering a society in early life, pay rates of contributions more than equivalent to meet the evils of the hour, a time will arrive when the sickness with which they are overtaken is beyond their resources. It is therefore necessary to store up in youth for the vicissitudes of old age, and on this principle every Friendly Society, worthy of the name, has been founded.

Much has been said of late on the necessarily inherent instability of Friendly Societies, and on their presumed want of permanence, various suggestions have been made, by which it is proposed to transfer to the management and responsibility of the Government some of the most important branches of their transactions and benefits. A deal of information is given in the preceding pages on the various circumstances which influence the permanence of Friendly Societies. A patient perusal of those pages will distinctly shew that there is no institution of the day connected with the social progress of society which can be regarded, in a financial sense, so safe and permanent in its



character as a Friendly Society, conducted on the principles herein pointed out, and now fully recognised by every one experienced in the management of this class of Provident Associations, conclusively proving that they offer the most undoubted security which can be conceived for the fulfilment of their engagements, their duration, and their permanence. It is believed impossible to point out a single instance in any part of the country whatever of the failure of a Friendly Society in which one or all of those conditions of stability and safety have not been violated.

These conditions may be briefly recited.

In the first place it is necessary, as already fully shewn, that every society should consist of members sufficiently numerous to realise the average results anticipated in the calculations on which its tables of contributions and benefits are founded. If this principle be not attended to, and the societies are small, the best and most skilful calculations may be insufficient to maintain their solvency. It might happen that rates very much in excess of what might be necessary in a large institution would, owing to adverse fluctuations, be totally inadequate to provide the benefits promised to the members ; or, on the other hand, rates that would be ruinously low in a society of considerable magnitude, might, from the prevalence of favourable ratios of sickness and mortality, prove quite ample, and even leave a surplus in a society of a limited number of members. This case is exceedingly well put in the Report of the Preston District Sick Union, and the various Quarterly Reports of the G. M. and Board of Directors also contain frequent allusions to societies breaking down or closing owing to adverse results from small numbers, while others, in which little sickness has been experienced, from the avarice and cupidity of the members inducing them to pocket the Surplus Funds. In the Report for April 1855, it is stated that—"Those who have paid attention to the



“ average rate of sickness, when the experience of few  
 “ members has been obtained, must have been struck with  
 “ the very large ratio in some instances experienced, in  
 “ other instances with the small rate of average sickness,  
 “ and, when it is considered the number of lodges in the  
 “ Unity having few members, it is surprising that more  
 “ lodges are not compelled to close, by experiencing far  
 “ more than the average rate of sickness. During the  
 “ year 1854, twenty lodges have joined other lodges ; thus,  
 “ instead of existing as forty separate and distinct lodges,  
 “ they only form twenty lodges in number, and causing  
 “ the number of lodges in the Unity to be diminished by  
 “ twenty.” “ Many of the lodges that have been closed  
 “ during the year 1854 have had considerably less than  
 “ the average amount of sickness amongst their members,  
 “ and this for a considerable period of time, and which has  
 “ enabled many of them to realise funds of £10 per  
 “ member, others more, and one as high as £25 per  
 “ member ; in some few other instances they have  
 “ experienced more than the average sickness, and their  
 “ funds have been reduced ; one lodge only closing for  
 “ want of funds to pay their sick members. When it is  
 “ seen that twenty lodges, containing 539 members, have  
 “ closed during the year, it will be very apparent, that with  
 “ the average number of members forming these lodges,  
 “ that when one or two members fall sick, in so few a  
 “ number, their funds must soon become exhausted.” In  
 fact, unless the number of members in a society be  
 considerable, there can be no security for its stability,  
 however great the skill and judgment exercised in its  
 management in other respects. Inattention, therefore, to  
 this one element is of itself sufficient to produce failure in  
 Friendly Societies.

In the second place, a periodical investigation should be  
 instituted into the state of the society's affairs. Such

periodical inquiries would afford the means of correcting any misconceptions which may have existed either at their formation or at any subsequent stage of their progress in respect to the rate of sickness and mortality to which they are presumed to be liable ; and the actual experience of each society would thus be brought to bear upon the financial adjustment of its assets and liabilities. These investigations should be made at not greater intervals than five years. One great mistake often made by the promoters and managers of small societies is, that they conceive if a particular society is eminently successful under a given scale of contributions and benefits, that those who are residing in another district, and living under different influences, cannot do better than follow the example of their neighbours in the adjustment of the contributions and benefits. This impression is natural enough ; but no conclusion has of late years been better established by practical research than the fact of the great disparity which exists between the ratios of sickness among societies established even in adjacent districts. This has been fully shewn even when the number of members in the societies is sufficiently large to realize the average amount of sickness peculiar to the district. Hence the necessity and the advantage of regulations imposing on societies the duty of periodical investigations into their affairs ; for by this means, actual experience, the most valuable of all teachers, is made operative in their future conduct and management. It is well known that in the county of Wilts, large and well-conducted societies have been subject to an unusually low ratio of sickness ; that in Somersetshire, other societies, equally well-conducted, have been subject to an unusually high ratio of sickness ; while in the intermediate districts of Devonshire, the ratio of sickness actually experienced by a large society, has proved very different from those which prevail in the other two counties. It will

also be found that, comparing the sickness experienced in two agricultural counties, Essex and Hampshire,—that in Essex the sickness is unusually high, while in Hampshire it is considerably under the average. Similar differences will be found to prevail in the experience of societies in different manufacturing towns, examples of which are given in pp. 30-36. Hence, the imperative necessity of periodical investigations, such as those herein suggested, in order to maintain the solvency and permanency of Provident Societies. As already stated, some lodges in the Manchester Unity have recently become alive to the advantages arising from periodical examinations of their assets and liabilities, and so great was the importance attached to these investigations that it was actually rendered compulsory on societies enrolled under the 9 and 10 Vict., c. 27, although unwisely omitted in all the subsequent Acts.

In the third place, there should be a regulation by which every society shall have a separate and distinct account kept of the receipts and disbursements made in respect of each benefit or fund. From the passing of the 8 and 9 Vict., c. 27, this was compulsory on all societies subsequently enrolled, until repealed by the 18 and 19 Vict., c. 63. The advantage of such a regulation is, that if the financial condition of any particular fund or benefit is at fault, the error would be more easily discovered than if the whole receipts and disbursements of the society were kept collectively. It might happen for instance, that while all the other funds of a society were well regulated, so far as their contributions and benefits were concerned, that the sickness benefits were making ruinous inroads on the society's assets ; but from the accounts being kept in the aggregate, this evil may not be perceived until it is too late to apply a remedy. If, however, the suggestion here offered had been adopted, it is evident that all such untoward influences would have

manifested themselves at a much earlier period, and when corrections could have been in time applied to restore the fund to a healthy and normal condition. Such societies have unfortunately been too often assumed to be in a prosperous condition, from the mere fact of their accumulated capital having kept increasing year after year. But as no portion of the money received for superannuation allowances and other deferred benefits should be touched for a long period of years, this fact was lost sight of in the aggregate system of accounts, and the monies belonging to them too often infringed upon for payments on account of the sickness fund, owing to the inadequacy of its contributions.

It can be abundantly proved, by the citation of numerous well known instances, that many societies would have been saved from ruin and dissolution, by the early adoption of such a rule as the one now suggested ; while in many other instances in which the breaking up of societies did not ensue, the hardship of one class of members supporting another, between which there was no common interest, would have been avoided.

The fourth precaution necessary to be observed is never to allow any member to subscribe for a sickness allowance greatly exceeding the average of the benefits allowed to all the members collectively ; and never, in any instance, to permit a member to subscribe for a sickness allowance which shall exceed two-thirds or three-fourths of his usual or average earnings while following his ordinary avocations. The enforcement of this condition would form a great protection in the administration of the society's affairs, and maintain a healthy moral tone of action amongst the members. Such a rule simplifies the administration of the sickness benefits, and is conservative of the society, by placing the members in a better position in regard to its management. The society's prosperity is greatly promoted



by the practice of never admitting any members to subscribe for a greater sickness allowance than will always, irrespective of other conditions, maintain a healthy inducement in the minds of sickness claimants to return to their occupations as soon as they possibly can with safety, rather than linger on the funds. Nothing can be more injurious and detrimental, both to the members and the society, than to permit of sickness allowances being granted that shall closely approximate to the member's earnings. There is scarcely any consideration by which it is possible to justify such a proceeding. The best securities for a society's success would be afforded in the adoption of this regulation.

A careful consideration of the four conditions now urged will shew that their practical effect is to maintain a constant adjustment between the contributions made by the members under all varying circumstances, and the liabilities they entail on the society. Were these four leading principles strictly observed in the management of Friendly Societies, failure is next to impossible. Let them be practically adopted, and it is difficult to conceive any human institution more beneficial and permanent.

It is not therefore to be assumed, as has of late been said in various influential quarters, that Friendly Societies are in their nature essentially instable. An attentive consideration of their history will satisfactorily shew the wonder is, that with so little information, until quite recently, of the real nature and extent of their liabilities, more of them have not broken down. It has been too much assumed, by even the educated classes, and not a few of those distinguished persons who have identified themselves publicly with the interests of these societies, that at best they were but mere pot-house schemes and temporary expedients as adjuncts to a small parish or congregation, simply calculated to assuage the evils of a day. It has remained for the working classes themselves to demonstrate



that their Benefit Societies are capable of accomplishing much beyond this, and those must be indifferent spectators indeed of the social progress amongst the industrious community who cannot clearly discern that through one form or other of these institutions, whether in the shape of the ordinary Friendly and Benefit Society, the Odd Fellow, Foresters, and Druid Lodges, the Rechabite Tents, and other description of Benefit Clubs, the hard-working prudential people of this country have already begun to work out in good earnest their own regeneration and independence. These associations are therefore certain, before long, to become engrafted with all the essential elements of stability and permanence which have just been pointed out.

No doubt Benefit Societies have suffered from many serious evils, but these will be found to have nearly all arisen from ignorance and inexperience. More light, however, has now dawned upon them. Even our Assurance Institutions, which are more simple in principle and much less difficult in management, have been anything but free from grave objections, but no one attempts in consequence to transfer their business and their responsibilities to the Government of the country. Let us see therefore the merits of the proposal made, on the plea of the insecurity of Friendly Societies, that the working people of this country should purchase deferred annuities and pensions from the Government, under the 16th and 17th Vict. cap. 45.

Apart from the objection so often urged, that the people have always shewn a great aversion to have any dealings in connection with their Benefit Clubs with the Government, and hence the immense multitude hitherto, of unenrolled societies, and the striking failure of the corresponding attempt to sell Government Annuities to them under the 3rd William IV., cap. 14. It is of the first importance that the fact of this failure on the part of the Government should be thoroughly understood, especially

by those now endeavouring to ingratiate into the favour of the people the recent Annuity Act. Great efforts were originally made by the Government officials to render the scheme successful. It was arranged that through the medium of savings banks such annuities could be purchased, and that in any parish or place in the United Kingdom where no savings bank was legally established, it was lawful to establish a society for carrying the provisions of the Act into execution, and that annuities of not less than £4 nor more than £30 per annum, might be secured, and the annuities might be either "immediate," "deferred," or "temporary annuities for a certain number of years." In this latter respect the former Act was more comprehensive than the recent one. Provision was also made that the consideration money for the annuities may be paid either in one sum in the first instance, or by weekly, monthly, quarterly, or yearly instalments, as may suit the convenience of the purchaser. In this respect also the former Act had an advantage over the present one, for it was provided, that if the contract were for a deferred annuity, to be purchased by annual payments, such annual payments must be made to the Commissioners yearly, although for the convenience of the purchaser the money might be received from him by the manager in weekly, monthly, or other instalments. The recent Act repeals the former one and contains no such provision. To the working man the existing Act is further inconvenient, as the fractional parts of one pound of annuity will not be granted, whereas this rule was in the former one limited to the fractional part of sixpence. It will likewise be found that the annuities were granted on more liberal terms under the 3rd William IV., cap. 14, than under the recent Act, 16th and 17th Vict., cap. 45.

The following shews the terms required to secure an annuity of £20 per annum, or not quite eight shillings weekly, according to each Act.

Purchase Money of Annuity deferred 25 Years.																			
Age at Purchase.	By Single Payment.						By Yearly Payment.			Age at Purchase.									
	3rd Wm. IV. c. 14.			16th and 17th Vict. c. 45.			3rd Wm. IV. c. 14.				16th and 17th Vict. c. 45.								
	Both Sexes.			Males.			Females.				Both Sexes.			Males.			Females.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.		£.	s.	d.	£.	s.	d.	£.	s.	d.
	114	11	6	137	0	0	152	13	4		6	14	6	7	13	4	8	11	8
20 to 21																			20 to 21
30 .. 31																			30 .. 31
40 .. 41																			40 .. 41
50 .. 51																			50 .. 51

It will be thus seen that under the former Act, the annuities were granted on much more favourable terms. In the above examples, the recent Act exacts an increase on the purchase money, by single payment of 18·053 per cent. in the case of males, and of no less than 35·312 per cent. for females; while the increase by annual payments amounts in the case of males to 13·182 per cent. and in that of females to 29·603 per cent.

Taking all these matters into account, it is evident that the present Act offers very inferior inducements to annuitants than that which has been repealed; but notwithstanding, the former Act, after having been in force for twenty years, entirely failed in the accomplishment of the object intended by its enactment. It is stated that in the whole of that period, only 2043 members have availed themselves of its provisions. The fact is, the members of Benefit Clubs have a strong, and it may be said in this instance, a well and justly conceived dislike to Government interference in such matters. Were there no other reason than the delay and annoyance to which working men, or the societies representing them, would be put by the circumlocutory formula through which all such transactions must necessarily pass, whenever undertaken by the Government of the country, there would be sufficient reason to render the operations of the Act unpopular and therefore unsuccessful. But there are still more formidable reasons to be advanced against it. Deferred annuities constitute one of the class of benefits for which provision can be more successfully made by Friendly Societies than any other. In the first place, an examination into the state and condition of health is unnecessary, for if the annuitant's health be bad, that is in favour of the society. In the second place, the administration of the benefit is one of the most simple: it does not require the constant watching and medical scrutiny and skill



necessary in the administration of the sickness benefits. And in the third place, the financial operations connected with it are also of the simplest kind possible. In the management of the sickness and death allowance benefits, a portion of the funds must always be kept on hand, or at immediate call, to meet the constantly occurring claims, and the consequence is, that unless a calculation be entered into, on the plan recommended in pp. 140 and 141 *ante*, to be made quinquennially, it is impossible to tell with any precision whether undue inroads are being made on the funds of those benefits or not. In regard, however, to deferred annuities, the case is very different, for every farthing in the shape of contributions must be husbanded and improved at interest, and remain untouched until the time arrives which is fixed for the annuitant to receive his pension; and even then, unlike the case of the sickness benefit, nothing more is needed to be established than the fact of his identity. All the trouble of visitation and medical scrutiny, to determine whether the sickness is feigned or otherwise, is unnecessary. The system of accounts and the whole management are therefore as simple as possible. It is, in consequence, difficult to conceive how any disaster could befall this branch of a society's affairs, always supposing the management subject to such of the four conditions already mentioned as may affect it. This statement is not a mere speculative opinion, for, while the failure of so many sickness clubs has to be lamented, a great number of annuity societies, established even when such matters were but imperfectly understood, can be pointed to as having been eminently successful. With periodical examinations of their affairs, it is next to impossible to conceive how, especially at the present time, when the laws of mortality are so much better understood, that it could be otherwise.

Independent, however, of the attempt to engraft the



recent Annuity Act on Benefit Societies, and thereby disturb the peaceful and improving condition which, for several years, in spite of many disturbing influences, they have been gradually assuming, it cannot be denied that in respect to them there has been a good deal of over-legislation. A curious and somewhat amusing proof of this will be obtained by a perusal of pp. 8-36 of the Appendix to the First Report of the Registrar of Friendly Societies in England. It will be found that between 1793 and 1855 no less than twenty-three Acts have been passed affecting them; and in the ten years 1845-55 as many as ten Acts, or one per annum. To know how instable the legislative opinion is on such matters, the Analysis of the 9 and 10 Vict. c. 27, 13 and 14 Vict. c. 115, and 18 and 19 Vict. c. 63, will well repay a perusal. The constant change of object, scope, and privilege under these three Acts has done much to retard the development of the larger and better conducted class of Friendly Societies established within the last few years.

It is hoped the present publication, by giving new assurance to the whole class of provident institutions, will, in some measure counteract this influence, and give a fresh impetus to their progress. The evident tendency in the minds of public men at the present time is to a conviction that the working people can, by legislative processes, be constrained impulsively to the adoption of prudential and saving habits. No mistake, however, is more fatal to the success of the institutions themselves. All that is needed to be done is, to enable the members of them, as between themselves, and also as between them and third parties, to sue and be sued in a cheap and expeditious manner, and leave all the rest to themselves. Their experience, judgment, interest, and tact will soon discover the most beneficial modes of management, without Government patronage or supervision. The members of Friendly

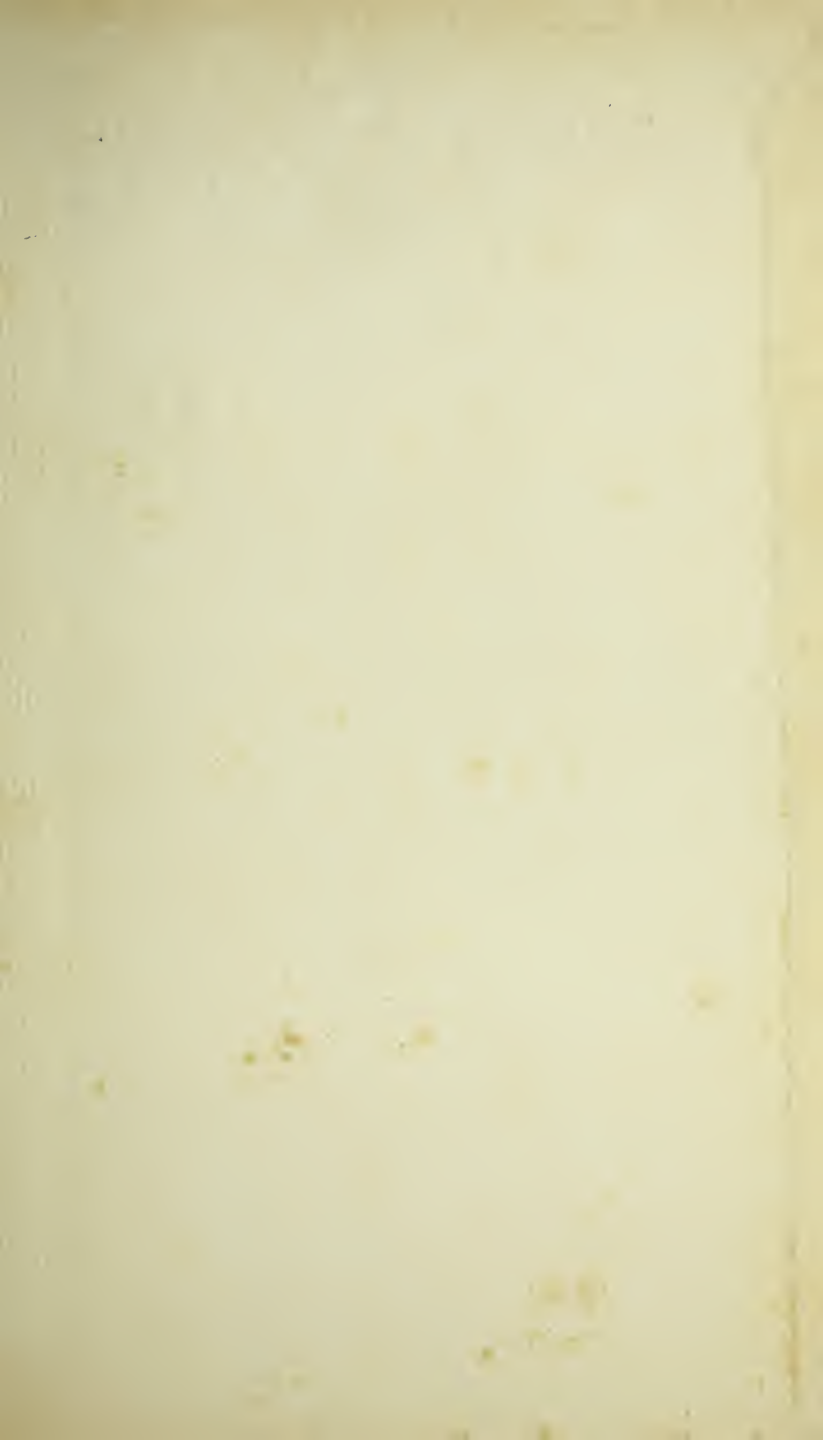
Societies in this country form a much more important class, socially, intellectually, and politically, than is generally supposed. To strengthen those habits of prudence and forethought, which they already manifest to a considerable extent, is a work of time, a gradual process, almost entirely dependent on themselves. Calm deliberation can alone help them, and it is trusted that the large amount of information now submitted for their help and guidance in the management of their societies will aid to bring about that happy consummation of their interests which even those of wealth and exalted station may behold with pleasure.

FRA<sup>s</sup> G. P. NEISON.

30, ESSEX STREET, STRAND,  
LONDON.









UNIVERSITY OF ILLINOIS-URBANA



3 0112 057416809